City of Newburyport Other Postemployment Benefits Plan

GASB 74 & GASB 75 Actuarial Valuation

With a Valuation Date of July 1, 2020

As of the Measurement Date: June 30, 2021

For the Reporting Date: June 30, 2021

Delivered October 6, 2021



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

TABLE OF CONTENTS

		<u>PAGE</u>
EXECUTIVE	SUMMARY	I
PRINCIPAL	RESULTS OF THE VALUATION	1
<u>EXHIBITS</u>		
A	FINANCIAL STATEMENT DISCLOSURES	5
В	REQUIRED SUPPLEMENTARY INFORMATION	17
APPENDIX		
I	LIABILITIES, ASSETS, & CASH FLOWS	23
II	PLAN PROVISIONS	28
III	ACTUARIAL METHODS & ASSUMPTIONS	31
IV	PLAN DEMOGRAPHICS	39
V	OVERVIEW OF GASB 74 & 75	42
VI	ASOP 41 DISCLOSURES	44
GLOSSARY		47

11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

October 6, 2021

Personal and Confidential

Mr. Ethan Manning Finance Director/City Auditor City of Newburyport 60 Pleasant Street Newburyport, MA 01950

Dear Mr. Manning:

We have performed an actuarial valuation of the City of Newburyport Other Postemployment Benefits Plan for the Reporting Date & fiscal year ending June 30, 2021 with a Measurement Date of June 30, 2021 and a Valuation Date of July 1, 2020. The figures presented in this report reflect the adoption, by the City of Newburyport, of Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75") effective for the fiscal years ending June 30, 2017 and June 30, 2017 respectively.

The financial results of the actuarial valuation are summarized in the report. The Executive Summaries highlight the results of the valuation. Additional information summarizing census data, actuarial assumptions, claim rates and the methodology for developing them, as well as a glossary of selected terms used in this study, is also included in the report.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions used are reasonable, reflecting the experience of the plan and reasonable expectations and, in combination, represent our best estimate of the anticipated experience under the plan.

We will be pleased to answer any questions that you may have regarding this actuarial valuation report.

Very truly yours,

Parker E. Elmore, ASA, EA, FCA, MAAA

President, CEO & Actuary



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

October 6, 2021

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the City of Newburyport other postemployment benefit programs with a Valuation Date of July 1, 2020 with a Measurement Date of June 30, 2021 for the Reporting Date & fiscal year ending June 30, 2021 in accordance with Government Account Standards Board Statement No. 74 & 75 and Actuarial Standards of Practice as issued by the American Academy of Actuaries. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Numbers 74 & 75 for the determination of the liability for postemployment benefits other than pensions.

The actuarial data is based on the plan of benefits verified by the City and on participant claims or premium data provided by the City and/or vendors employed by the City.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may yield results significantly different than those reported here. As such, additional determinations may be needed for other purposes including determining the benefit security at termination and/or adequacy of the funding of an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion represents the information necessary to comply with GASB Statements Number 74 and 75 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries and other professional actuarial organizations and meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the City are reasonably related to the experience and expectations of the postemployment benefits programs.

Parker E. Elmore, ASA, EA, FCA, MAAA

President, CEO & Actuary



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road,

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXECUTIVE SUMMARY

How did plan liabilities change from FY 20 to FY 21?

Plan Experience

For the year ending on the Measurement Date of June 30, 2021, experience was largely in line with expectation, with an experience gain of \$113,761 or 0.13% of the beginning Total OPEB Liability ("TOL"). This was mainly due to the average Medicare Supplement plan premium increasing 2% instead of the expected 9% increase over the 2-year period. This was mostly offset by an increase in Medicare Pt B penalties and surcharges paid to late-enrollment retirees.

Assumption Changes

One or more key assumptions have changed since the prior valuation. The total impact of these assumption changes increased disclosed liabilities by \$4.0 million, as detailed below.

- ✓ Due to the GASB 75 standards the discount rate has been changed from 3.75% to 4.25% decreasing the disclosed liability by \$9.1 million.
- ✓ Due to updated guidance related to the implementation of ASOP 6, we have updated our methodology for calculating expected claims increasing the disclosed liability by \$13.0 million.
- ✓ Based on recent actuarial research we have adopted the Getzen model for future projected healthcare costs. This change had no material impact on plan liabilities.

It is important to remember that actuarial assumptions or changes in such do not impact the actual cost of the Plan. Rather, they impact the timing of the recognition of such costs.

Investment Experience

✓ During the period there was an investment gain of \$75,268 due to asset performance above the expected rate of return.

Changes in Benefits Terms

✓ To the best of our knowledge there have been no material changes in benefit terms that would impact the figures shown in this report.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXECUTIVE SUMMARY

Recognition Period

- ✓ Changes in assumptions & plan experience are amortized into the net OPEB expense over 5.00 years.
- ✓ Differences between projected & actual earnings on OPEB plan investments are amortized into the net OPEB expense over 5.00 years
- ✓ Changes in benefit terms are to be recognized in full immediately

Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

Discount Rate Determinants

- ✓ Employer Current and Future Benefit Payments
- ✓ Municipal Bond Rate The S&P 20-year high grade municipal bond index was 2.18% as of June 30, 2021.
- ✓ Current Asset Level The City had \$1,020,910 of OPEB assets as of June 30, 2021.
- ✓ Funding Policy The City is expected to contribute 1% of annual health insurance spending until their pension system is fully funded, at which point the City will reallocate the funds used to pay its pension amortization towards OPEB.
- ✓ Investment Policy The City is expected to earn 6.77% per year on assets based on its investment policy.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

EXECUTIVE SUMMARY

Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare supplement) plans represent 73.86% of the total plan liabilities
- ✓ Age at which plan participants retire
- ✓ Percentage of plan participants who elect coverage for themselves and/or a spouse
- ✓ Medical care cost inflation rate We currently assume medical costs increase according to the Getzen Model of Long-Run Medical Cost Trends for Active and Medicare supplement plans.
- ✓ Discount Rate (4.25%) Higher discount rates yield lower liabilities and vice versa
- ✓ Cost Sharing Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance

Medicare Buy-In

The City currently has 5 retirees or covered spouses who are over the age of 65 and are enrolled in Active medical plans rather than Medicare Supplement (Senior) plans. Under Actuarial Standards of Practice for OPEB, we are required to reflect the projected higher healthcare costs that occur as retirees age.

Recently, some of our clients have seen substantial cost savings by "buying into" Medicare for retirees who would otherwise be ineligible. To buy into Medicare the City would need to pay the Medicare Part A premium and the Medicare Part A and B penalties. While the cost to buy into Medicare is significant, it is likely still far less than the cost of the claims that the associated retirees are expected to incur. You may wish to review their Medicare eligibility to see if they are already eligible for Medicare or if a "buy-in" is appropriate as this could yield a reduction in your OPEB annual costs and disclosed liabilities. If you are in this situation, we encourage you to talk to your healthcare consultant to see if this might be viable.



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXECUTIVE SUMMARY

Key Plan Metrics

While an actuarial valuation under GASB 74/75 can be very complex with many variables, we find it helpful to look at several key metrics (shown below) to better allow you to manage your plan.

Representative Plan Statistics							
Valuation Date	July 1, 2020	July 1, 2018					
Measurement Date & Period Ending	June 30, 2021	June 30, 2020					
Reporting Date/Fiscal Year End	June 30, 2021	June 30, 2020					
Total OPEB Liability	96,642,165	89,375,286					
Per Eligible Active Plan Participant	82,450	76,350					
Per Retiree/Spouse Plan Participant	92,106	91,753					
Total Annual Service Cost (Annual Benefit Accrual)	3,141,029	3,030,651					
Per Eligible Active Plan Participant	5,333	5,198					
Expected Employer Share of Retiree Costs	3,163,792	2,876,909					
Per Retiree/Spouse Plan Participant	6,061	5,884					
Net OPEB Liability as a % of Covered Payroll	238.10%	222.40%					



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXECUTIVE SUMMARY

Liabilities & Benefit Payments in Today's Dollars

With the growth of medical care costs over time, the nominal accrued liabilities ("TOL") and benefit payments can appear daunting. However, it is important to remember that a dollar paid in the future is worth less than a dollar paid today.

	Number of				
	Retirees,				Present Value at 3.00% of
For the Period Ending on	Spouses, &		Present Value at 3.00%	Employer Share of	Employer Share of
the Measurement Date	Surviving		of Total OPEB	Premiums/Claims	Premiums / Claims
of:	Spouses	Total OPEB Liability	Liability	Including "Implicit Cost"	Including "Implicit Cost"
June 30, 2021	522	96,642,165	96,642,165	3,163,792	3,163,792
June 30, 2026	622	115,233,647	99,401,556	4,136,620	3,568,285
June 30, 2031	652	134,335,425	99,958,172	5,405,575	4,022,255
June 30, 2036	643	153,804,969	98,721,557	6,452,117	4,141,368
June 30, 2041	606	175,165,890	96,985,106	7,429,291	4,113,418
June 30, 2046	563	201,784,028	96,373,176	8,102,414	3,869,758
June 30, 2051	529	235,286,363	96,934,866	8,854,960	3,648,126



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

EXECUTIVE SUMMARY

Continuing OPEB Disclosures

In addition to pension benefits, municipal entities may provide retired employees with healthcare and life insurance benefits. The portion of the cost of such benefit paid by these entities is generally provided on a pay-as-you-go basis.

The pay-as-you-go costs to the City for such benefits for the most recent years is as follows:

Fiscal Year Ending		Cost
June 30, 2022	(budgeted)	3,355,909
June 30, 2021	Actual	3,163,792
June 30, 2020	Actual	2,876,909
June 30, 2019	Actual	2,782,475
June 30, 2018	Actual	2,656,780
June 30, 2017	Actual	2,457,447

The City performs actuarial valuations of its non-pension post-employment benefits liability in accordance with GASB reporting requirements. As of the June 30, 2021 Measurement Date, the Net OPEB Liability ("NOL") was determined to be \$95,621,255 assuming a discount rate of 4.25%. The City has established an OPEB Trust and plans to fund this liability. The City is expected to contribute 1% of annual health insurance spending until their pension system is fully funded, at which point the City will reallocate the funds used to pay its pension amortization towards OPEB. The balance of this fund as of June 30, 2021 was \$1,020,910. See the City's audit reports for additional information.



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

PRINCIPAL RESULTS OF THE VALUATION

City of Newburyport Assuming Funding - 4.25% discount rate Comparison of Plan Liabilities to Prior Valuation

	Valuation Date	July 1, 2020	July 1, 2018
	For the Measurement Period ending on the Measurement Date of:	June 30, 2021	June 30, 2020
	For the Reporting Period & Fiscal Year ending on:	June 30, 2021	June 30, 2020
I.	Total OPEB Liability		
	A. Actives	48,562,990	44,511,860
	B. Retirees/Disabled	<u>48,079,175</u>	44,863,426
	C. Total	96,642,165	89,375,286
II.	Fiduciary Net Position [Plan Assets]	1,020,910	788,904
III.	Net OPEB Liability (Asset) [I II.]	95,621,255	88,586,382
IV.	Funded Ratio [II. / I.]	1.06%	0.88%
V.	Number of Eligible Participants		
	A. Actives	589	583
	B. Retirees/Disabled & Dependents	<u>522</u>	<u>489</u>
	C. Total	1,111	1,072
VI.	Service Cost	3,141,029	3,030,651
VII.	Financial Statement Expense/(Income)	8,662,949	7,939,595
VIII	Employer Contribution to the OPEB Trust	(100,000)	0
IX.	Deferred Inflow of Resources	(4,244,899)	(5,985,584)
X.	Deferred Outflow of Resources	11,941,021	12,045,990
XI.	Money Weighted Rate of Return	16.73%	1.97%
XII.	20-year Municipal Bond Rate (SAPIHG)	2.18%	2.66%
XIII.	Expected Long Term Rate of Return (Net of Expense)	6.77%	7.01%
XIV.	Crossover Year	Immediate	Immediate
XV.	Discount Rate	4.25%	3.75%



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

PRINCIPAL RESULTS OF THE VALUATION

City of Newburyport Plan Liabilities as of the June 30, 2021 Measurement Date

General Government Water Enterprise **Sewer Enterprise Employees** and **School Employees Employees and Employees and** Retirees and Retirees Retirees Retirees Total Total OPEB Liability I. A. Actives 15,793,440 30,224,541 1,188,255 1,356,754 48,562,990 Retirees/Disabled 19,553,903 27,320,676 808,089 396,507 48,079,175 C. Total 35,347,343 57,545,217 1,996,344 1,753,261 96,642,165 II. Fiduciary Net Position [Plan Assets] 373,403 607,897 21,089 18,521 1,020,910 Net OPEB Liability (Asset) [I. - II.] 34,973,940 56,937,320 1,975,255 95,621,255 1,734,740 IV. Number of Eligible Participants A. Actives 370 22 589 181 16 Retirees/Disabled 299 9 <u>522</u> 199 <u>15</u> C. Total 380 669 37 25 1,111 For the Reporting Date and Fiscal Year Ending June 30, 2021 Service Cost 1,022,578 1,921,126 111,865 85,460 3,141,029 Financial Statement Expense/(Income) 3,032,978 5,216,514 227,087 186,370 8,662,949 **Employer Share of Costs** (1,280,815)(1,773,286)(62,999)(46,692)(3,163,792)VIII. Employer (Payments)/Withdrawals to/from OPEB Trust (36,233)(59,823)(2,102)(1,842)(100,000)(3,263,792)



Total Employer Contribution [VII. + VIII.]

(1,317,048)

(1,833,109)

(65,101)

(48,534)

11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

PRINCIPAL RESULTS OF THE VALUATION

City of Newburyport Assuming Funding - 4.25% discount rate For the Period Ending on the June 30, 2021 Measurement Date

		Actives		Ret	irees/Disable	ed	Cross d Total
	Under Age 65	Age 65+	Actives Total	Under Age 65	Age 65 +	Retirees Total	Grand Total
Present Value of Future Benefits							
A. Participants	17,288,639	25,974,001	43,262,640	3,609,717	28,535,311	32,145,028	75,407,668
B. Spouses	<u>11,794,909</u>	<u>18,712,478</u>	<u>30,507,387</u>	<u>2,053,145</u>	<u>13,881,002</u>	<u>15,934,147</u>	<u>46,441,534</u>
C. Total	29,083,548	44,686,479	73,770,027	5,662,862	42,416,313	48,079,175	121,849,202
Total OPEB Liability							
A. Participants	11,605,333	16,819,859	28,425,192	3,609,717	28,535,311	32,145,028	60,570,220
B. Spouses	<u>7,997,050</u>	12,140,748	<u>20,137,798</u>	<u>2,053,145</u>	<u>13,881,002</u>	15,934,147	<u>36,071,945</u>
C. Total	19,602,383	28,960,607	48,562,990	5,662,862	42,416,313	48,079,175	96,642,165
Service Cost							
A. Participants	671,184	1,184,404	1,855,588	0	0	0	1,855,588
B. Spouses	441,252	844,189	1,285,441	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,285,441</u>
C. Total	1,112,436	2,028,593	3,141,029	0	0	0	3,141,029



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

PRINCIPAL RESULTS OF THE VALUATION

CURRENT FUNDING POLICY (OPEN GROUP)

Funding - 4.25% discount rate

For the	Period Ending on the	I. Total OPEB	II. Fiduciary Net Position as of Measurement Date	III. Net OPEB	IV. Funded		VI. Employer Share of Benefit	VII. Trust Contributions	VIII. Gross Trust	IX. Benefit Payments Reimbursed	X. Administrative & Investment Expenses	XI. Total Employer Payments Less
Fiscal	Measurement Date	Liability ("TOL") as	with an expected	Liability (Asset)	Ratio	V. Service	Payments (With	Beyond Pay-as-	Contributions	from the	Reimbursed from	Reimbursements
Year	of:	of Measurement Date	6.77% return	[I II.]	[II. / I.]	Cost	Implicit Cost)	you-go	[VI. + VII.]	Trust	the Trust	[VIII IX X.]
2021	June 30, 2021	96,642,165	1,020,910	95,621,255	1.06%	3,141,029	3,163,792	100,000	3,263,792	3,163,792	0	100,000
2022	June 30, 2022	100,264,740	1,152,023	99,112,717	1.15%	2,821,835	3,355,909	60,000	3,415,909	3,355,909	0	60,000
2023	June 30, 2023	103,942,476	1,292,013	102,650,463	1.24%	2,929,215	3,466,575	60,000	3,526,575	3,466,575	0	60,000
2024	June 30, 2024	107,629,409	1,441,480	106,187,929	1.34%	3,017,425	3,754,527	60,000	3,814,527	3,754,527	0	60,000
2025	June 30, 2025	111,414,829	1,601,066	109,813,763	1.44%	3,116,058	3,913,239	60,000	3,973,239	3,913,239	0	60,000
2026	June 30, 2026	115,233,647	1,771,456	113,462,191	1.54%	3,212,499	4,136,620	60,000	4,196,620	4,136,620	0	60,000
2027	June 30, 2027	119,053,586	1,953,381	117,100,205	1.64%	3,303,197	4,382,983	60,000	4,442,983	4,382,983	0	60,000
2028	June 30, 2028	122,879,389	2,147,623	120,731,766	1.75%	3,386,290	4,649,188	60,000	4,709,188	4,649,188	0	60,000
2029	June 30, 2029	126,737,744	2,355,015	124,382,729	1.86%	3,473,647	4,863,455	60,000	4,923,455	4,863,455	0	60,000
2030	June 30, 2030	130,568,286	2,576,447	127,991,839	1.97%	3,574,629	5,104,349	60,000	5,164,349	5,104,349	0	60,000
2031	June 30, 2031	134,335,425	2,812,870	131,522,555	2.09%	3,664,284	5,405,575	60,000	5,465,575	5,405,575	0	60,000
2032	June 30, 2032	138,175,352	3,065,299	135,110,053	2.22%	3,757,855	5,586,239	60,000	5,646,239	5,586,239	0	60,000
2033	June 30, 2033	142,025,385	3,334,817	138,690,568	2.35%	3,858,226	5,829,388	60,000	5,889,388	5,829,388	0	60,000
2034	June 30, 2034	145,900,592	3,622,582	142,278,010	2.48%	3,963,460	6,067,374	60,000	6,127,374	6,067,374	0	60,000
2035	June 30, 2035	149,864,076	3,929,829	145,934,247	2.62%	4,081,031	6,271,141	60,000	6,331,141	6,271,141	0	60,000
2036	June 30, 2036	153,804,969	11,945,596	141,859,373	7.77%	4,199,072	6,452,117	7,500,000	13,952,117	6,452,117	0	7,500,000
2037	June 30, 2037	157,901,846	20,504,031	137,397,815	12.99%	4,323,386	6,684,283	7,500,000	14,184,283	6,684,283	0	7,500,000
2038	June 30, 2038	162,006,643	29,641,872	132,364,771	18.30%	4,452,647	6,969,129	7,500,000	14,469,129	6,969,129	0	7,500,000
2039	June 30, 2039	166,174,814	39,398,344	126,776,470	23.71%	4,589,421	7,129,181	7,500,000	14,629,181	7,129,181	0	7,500,000
2040	June 30, 2040	170,705,743	49,815,330	120,890,413	29.18%	4,729,921	7,271,436	7,500,000	14,771,436	7,271,436	0	7,500,000
2041	June 30, 2041	175,165,890	60,937,546	114,228,344	34.79%	4,878,996	7,429,291	7,500,000	14,929,291	7,429,291	0	7,500,000
2042	June 30, 2042	180,030,562	72,812,736	107,217,826	40.44%	5,032,016	7,534,028	7,500,000	15,034,028	7,534,028	0	7,500,000
2043	June 30, 2043	185,163,708	85,491,876	99,671,832	46.17%	5,198,450	7,545,778	7,500,000	15,045,778	7,545,778	0	7,500,000
2044	June 30, 2044	190,564,561	99,029,394	91,535,167	51.97%	5,375,519	7,678,395	7,500,000	15,178,395	7,678,395	0	7,500,000
2045	June 30, 2045	196,211,740	113,483,402	82,728,338	57.84%	5,562,352	7,896,359	7,500,000	15,396,359	7,896,359	0	7,500,000
2046	June 30, 2046	201,784,028	128,915,946	72,868,082	63.89%	5,759,218	8,102,414	7,500,000	15,602,414	8,102,414	0	7,500,000
2047	June 30, 2047	208,026,306	145,393,273	62,633,033	69.89%	5,966,611	8,242,447	7,500,000	15,742,447	8,242,447	0	7,500,000
2048	June 30, 2048	214,503,957	162,986,115	51,517,842	75.98%	6,189,687	8,419,551	7,500,000	15,919,551	8,419,551	0	7,500,000
2049	June 30, 2049	221,102,322	181,769,993	39,332,329	82.21%	6,419,703	8,689,521	7,500,000	16,189,521	8,689,521	0	7,500,000
2050	June 30, 2050	228,174,176	201,825,539	26,348,637	88.45%	6,659,259	8,770,242	7,500,000	16,270,242	8,770,242	0	7,500,000
2051	June 30, 2051	235,286,363	223,238,846	12,047,517	94.88%	6,914,407	8,854,960	7,500,000	16,354,960	8,854,960	0	7,500,000
2052	June 30, 2052	242,431,344	246,101,834	(3,670,490)	101.51%	7,176,204	9,093,094	7,500,000	16,593,094	9,093,094	0	7,500,000





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require the following disclosures in the financial statements:

1. OPEB Expense Development

	Components of the City's OPEB Expenses for the Fiscal Year Ending June 30,	, 2021
Des	scription	Amount
I.	Service Cost	3,141,029
II.	Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	3,410,587
III.	Deferred (Inflows)/Outflows from Plan Experience*	(1,908,283)
IV.	Deferred (Inflows)/Outflows from Changes of Assumptions*	4,087,703
V.	Projected Earnings on OPEB Plan Investments	(56,738)
VI.	Deferred (Inflows)/Outflows from Earnings on Plan Investments**	(11,349)
VII.	Financial Statement Expense/(Income) Prior to Plan Design Changes [I. + II.+ III. + IV. + V. + VI.]	8,662,949
VIII	. Expense Related to Change in Benefit Terms***	0
IX.	Financial Statement Expense/(Income) [VII. + VIII.]	8,662,949

^{*} Amortized over 5.00 years



^{**} Amortized over 5.00 years

^{***} Recognized Immediately

11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

2. <u>Changes in Net OPEB Liability</u>

	Changes in Net OPEB Li	ability		
	Ç	•	Increase (Decrease)	
		Total OPEB	Plan Fiduciary	Net OPEB
		Liability	Net Position	Liability
I.	Balances for the June 30, 2020 Reporting Date	89,375,286	788,904	88,586,382
II.	Prior Period Adjustment	<u>0</u>	<u>0</u>	<u>0</u>
III.	Balances for the June 30, 2020 Reporting Date with Adjustment [I. + II.]	89,375,286	788,904	88,586,382
	Changes for the year:			
IV.	Service Cost	3,141,029	0	3,141,029
V.	Interest on Total OPEB Liability, Service Cost, and Benefit Payments	3,410,587	0	3,410,587
VI.	Changes in Benefit Terms *	0	0	0
VII.	Change in Assumptions **	3,992,816	0	3,992,816
VIII.	Differences Between Actual and Expected Experience **	(113,761)	0	(113,761)
IX.	Net Investment Income	0	132,006	(132,006)
X.	Employer Contributions to Trust	0	3,263,792	(3,263,792)
XI.	Benefit Payments Withdrawn from Trust	0	(3,163,792)	3,163,792
XII.	Benefit Payments Excluding Implicit Cost	(2,581,429)	0	(2,581,429)
XIII.	Implicit Cost Amount	(582,363)	0	(582,363)
XIV.	Total Benefit Payments Including Implicit Cost [XII. + XIII.]	(3,163,792)	0	(3,163,792)
XV.	Administrative Expense	0	0	0
XVI.	Other Charges	0	0	0
XVII.	Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]	7,266,879	232,006	7,034,873
XVIII	Balances for the June 30, 2021 Reporting Date [III.+XVII.]	96,642,165	1,020,910	95,621,255

^{*} Recognized Immediately



^{**} Amortized over 5.00 years

11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

3. Changes in Net OPEB Expense

				Experience	e				
Fiscal Year	Differences Between Actual & Expected Experience	Recognition Period (Years)	Remaining Balance	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
2017									
2018	0	5.13	0	0	0	0			
2019	(9,654,268)	5.16	(4,041,322)	(1,870,982)	(1,870,982)	(1,870,982)	(299,358)		
2020	(75,075)	5.16	(45,977)	(14,549)	(14,549)	(14,549)	(14,549)	(2,330)	
2021	(113,761)	5.00	(91,009)	(22,752)	(22,752)	(22,752)	(22,752)	(22,753)	
2022									
2023									
2024									
2025									
2026									
otal Rem	naining Balance		(4,178,308)						
Net increa	ase (decrease) in OPEB E	xpense		(1,908,283)	(1,908,283)	(1,908,283)	(336,659)	(25,083)	0

Fiscal Year	Differences from Changes in Actuarial Assumptions	Recognition Period (years)	Remaining Balance	<u>2021</u>	<u>2022</u>	<u>2023</u>	2024	<u>2025</u>	<u>2026</u>
2017									
2018	0	5.13	0	0	0	0			
2019	8,642,414	5.16	3,617,756	1,674,886	1,674,886	1,674,886	267,984		
2020	8,329,553	5.16	5,101,045	1,614,254	1,614,254	1,614,254	1,614,254	258,283	
2021	3,992,816	5.00	3,194,253	798,563	798,563	798,563	798,563	798,564	
2022									
2023									
2024									
2025									
2026									
	aining Balance		11,913,054						
	se (decrease) in OPEB E	xpense	, ,,,,,	4,087,703	4,087,703	4,087,703	2,680,801	1,056,847	0



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Deferr	red (Inflows)/Outflows	s in OPEB Expo	_	n the Recogni B Plan Invest		rences Betwe	en Projected &	& Actual Earni	ngs on
Fiscal Year	Differences Between Actual & Expected Earnings	Recognition Period (years)	Remaining Balance	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
2017									
2018	(31,885)	5.00	(6,377)	(6,377)	(6,377)				
2019	11,405	5.00	4,562	2,281	2,281	2,281			
2020	39,007	5.00	23,405	7,801	7,801	7,801	7,803		
2021	(75,268)	5.00	(60,214)	(15,054)	(15,054)	(15,054)	(15,054)	(15,052)	
2022									
2023									
2024									
2025									
2026									
Total Rem	aining Balance		(38,624)						
Vet increa	se (decrease) in OPEB Ex	pense		(11,349)	(11,349)	(4,972)	(7,251)	(15,052)	0



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Statement of Outflows & Inflows Arising from Current & Prior Reporting Periods for the Measurement Period Ending on June 30, 2021 to be
Reported for the Fiscal Year Ending June 30, 2021

Reported for the Fiscal Year Ending Ju-	ne 30, 2021		
	Deferred Outflows of Resources	Deferred Inflows of Resources	Total
I. Contributions made subsequent to the Measurement Date	0	0	0
II. Differences Between Actual & Expected Experience	0	(4,178,308)	(4,178,308)
III. Changes of Assumptions	11,913,054	0	11,913,054
IV. Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	<u>27,967</u>	(66,591)	(38,624)
V. Total [I.+II.+III.+IV.]	11,941,021	(4,244,899)	7,696,122



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Annual Amortization of Deferred (Inflows)/Outflows	
The balance of deferred (inflows)/outflows as of June 30, 2021 will be recognized in future years.	ars as shown below.
Year ending June 30:	
2022	2,168,071
2023	2,174,448
2024	2,336,891
2025	1,016,712
2026	0
Thereafter	0

4. <u>Discount Rate</u>

The discount rate used to measure the Total OPEB liability was 4.25% as of June 30, 2021 and 3.75% as of June 30, 2020. The projection of cash flows used to determine the discount rate assumed that contributions will be made in accordance with the City's funding policy. Based on these assumptions, the OPEB Plan's Fiduciary Net Position is projected to be insufficient to make all projected benefit payments to current plan members. Therefore, the long-term expected rate of return on the OPEB Plan assets is applied to the projected benefits payments which the Fiduciary Net Position is expected to be sufficient to cover and the Municipal Bond Rate is applied thereafter. The Municipal Bond Rate is based on the S&P Municipal Bond 20 – Year High Grade Index ("SAPIHG"), which was 2.18% as of June 30, 2021. The S&P Municipal Bond 20 - Year High Grade Index is the index rate for 20 year, tax exempt general obligation municipal bonds with an average rate of AA/Aa or higher.



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

5. Funding Policy

The contribution requirements of plan members and the City are established and may be amended through City ordinances. For the period ending on the June 30, 2021 Measurement Date, total City premiums plus implicit costs for the retiree medical program were \$3,163,792. The City also contributed \$100,000 to an OPEB Trust for a total contribution during the measurement period of \$3,263,792 to be reported on the financial statement for the fiscal year ending June 30, 2021.

6. <u>Investment Policy</u>

The chart below shows how the long-term rate of return on assets is developed based on the City's Investment Policy.

Investment Targ	get Allocation & E	xpected Long-Term Real Rate of Return	
			Long-Term
	Target		Expected Real
Asset Class	Allocation	Asset Class	Rate of Return*
Domestic Equity - Large Cap	14.50%	Domestic Equity - Large Cap	4.90%
Domestic Equity - Small/Mid Cap	3.50%	Domestic Equity - Small/Mid Cap	5.40%
International Equity - Developed Market	16.00%	International Equity - Developed Market	5.32%
International Equity-Emerging Market	6.00%	International Equity-Emerging Market	6.26%
Domestic Fixed Income	20.00%	Domestic Fixed Income	1.40%
International Fixed Income	3.00%	International Fixed Income	1.30%
Alternatives	23.00%	Alternatives	6.32%
Real Estate	14.00%	Real Estate	6.25%
Cash & Cash Equivalents	0.00%	Cash & Cash Equivalents	<u>0.00%</u>
Total	100.00%		
		I. Real Rate of Return	4.77%
		II. Inflation Assumption	2.50%
		III. Total Nominal Return [I. + II.]	7.27%
		IV. Investment Expense	0.50%
		V. Net Investment Return [IIIIV.]	6.77%

^{*} Mean Geometric Returns based on 2020 Horizon Survey of Capital Market Assumptions



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

7. Schedule of The City's Contributions

For the Fiscal Year Ending	Actuarial Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
June 30, 2021	6,917,027	(3,263,792)	3,653,235	40,167,210	8.13%
June 30, 2020	7,819,663	(2,876,909)	4,942,754	39,836,189	7.22%
June 30, 2019	6,919,837	(2,842,475)	4,077,362	3,867,592	73.49%
June 30, 2018	7,329,686	(2,706,780)	4,622,906	41,172,059	6.57%
June 30, 2017	7,217,226	(2,482,447)	4,734,779	39,972,872	6.21%



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

(702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

8. Effect of 1% Change in Healthcare Trend

Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2021 Measurement Date			
	1% Decrease	Current Trend Rate	1% Increase
I. Total OPEB Liability	82,811,567	96,642,165	114,223,483
II. Fiduciary Net Position	<u>1,020,910</u>	<u>1,020,910</u>	<u>1,020,910</u>
III. Net OPEB Liability (Asset) [III.]	81,790,657	95,621,255	113,202,573
IV. Service Cost	2,440,397	3,141,029	4,114,304

9. Effect of 1% Change in Discount Rates

Impact of a 1% Change in the Discount Rate as of the June 30, 2021 Measurement Date			
	1% Decrease	Current Discount Rate	<u>1% Increase</u>
I. Total OPEB Liability	114,278,973	96,642,165	80,953,751
II. Fiduciary Net Position	<u>1,020,910</u>	<u>1,020,910</u>	<u>1,020,910</u>
III. Net OPEB Liability (Asset) [III.]	113,258,063	95,621,255	79,932,841
IV. Service Cost	4,215,327	3,141,029	2,262,323



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

10. Money Weighted Rate of Return

	Plan		
	Investments /	Periods	Period
	Net External	Invested	Weight
	Cash Flows		
I. Beginning value - June 30, 2020	788,904	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	0	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	0	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	0	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
<u>June</u>	100,000	0	0.0000
II. Total net external cash flow	100,000		
III. Earnings and increase in fair value	132,006		
IV. Ending value - June 30, 2021 [I.+II.+III.]	1,020,910		
Money Weighted Rate of Return	16.73%		
Asset Value - June 30, 2021	1,020,910		





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

11. OPEB Liability, OPEB Expense

	Fiscal Year Ending June 30, 2021				
	General Government	School	Water Enterprise	Sewer Enterprise	
	Employees and	Employees and	Employees and	Employees and	
	Retirees	Retirees	Retirees	Retirees	Total
I. Total OPEB Liability as of June 30, 2021	35,347,343	57,545,217	1,996,344	1,753,261	96,642,165
II. Fiduciary Net Position as of June 30, 2021	373,403	607,897	21,089	18,521	1,020,910
III. Net OPEB Liability (Asset) as of June 30, 2021 [I II.]	34,973,940	56,937,320	1,975,255	1,734,740	95,621,255
IV. Service Cost	1,022,578	1,921,126	111,865	85,460	3,141,029
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	1,238,164	2,038,207	71,609	62,607	3,410,587
VI. Projected Earnings on OPEB Plan Investments	(20,746)	(33,789)	(1,173)	(1,030)	(56,738)
VII. Net Recognition of Deferred (Inflows)/Outflows	792,982	1,290,970	44,786	39,333	2,168,071
VIII. Expense Related to Change in Benefit Terms	0	0	0	0	0
IX. Financial Statement Expense/(Income) [IV. + V. + VI. + VII. + VIII.]	3,032,978	5,216,514	227,087	186,370	8,662,949
X. Employer Share of Costs	(1,280,815)	(1,773,286)	(62,999)	(46,692)	(3,163,792)
XI. Employer (Payments) Withdrawals to/from OPEB Trust	(36,233)	(59,823)	(2,102)	(1,842)	(100,000)
XII. Total Employer Contribution [X. + XI.]	(1,317,048)	(1,833,109)	(65,101)	(48,534)	(3,263,792)
XIII. Net OPEB Expense/(Income) [IX. + XII.]	1,715,930	3,383,405	161,986	137,836	5,399,157



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2021 Measurement Date)

12. OPEB Liability, OPEB Expense and Deferred Inflow/Outflow

Valuation Date	July 1, 2020
For the Measurement Period ending on the Measurement Date of:	June 30, 2021
For the Reporting Period & Fiscal Year ending on:	June 30, 2021

Source of Deferred Inflow/Outflow	
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	(4,178,308)
II. Deferred (Inflow)/Outflow from Investment Experience	(38,624)
III. Deferred (Inflow)/Outflow from Changes in Assumptions	11,913,054

Change in Deferred Inflow/Outflow		
I. Deferred Outflow at the beginning of the period	12,045,990	
II. Deferred Outflow created during the period	3,992,816	
III. Deferred Outflow recognized during the period	4,097,785	
IV. Change in Deferred Outflow (II III.)	(104,969)	
V. Deferred Outflow at end of the period (I. + IV.)	11,941,021	
VI. Deferred Inflow at the beginning of the period	(5,985,584)	
VII. Deferred Inflow created during the period	(189,029)	
VIII. Deferred Inflow recognized during the period	(1,929,714)	
IX. Change in Deferred Inflow (VII VIII.)	1,740,685	
X. Deferred Inflow at end of the period (VI. + IX.)	(4,244,899)	

Net OPEB Liability	
I. Net OPEB Liability at beginning of period	88,586,382
II. Service Cost	3,141,029
III. Interest on Total OPEB Liability, Service Cost, and Payments	3,410,587
IV. Projected Investment Income	(56,738)
V. Total Employer Contributions	(3,263,792)
VI. Expense Related to Change in Benefit Terms	0
VII. Net OPEB Expense/(Income) - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + IV. + V. + VI.)	3,231,086
VIII. Deferred Outflow created during the period	3,992,816
IX. Deferred Inflow created during the period	(189,029)
X. Net OPEB Liability at end of period (I. + VII. + VIII. + IX.)	95,621,255

Net OPEB Expense					
I. Service Cost	3,141,029				
II. Interest on Total OPEB Liability, Service Cost, and Payments	3,410,587				
III. Projected Investment Income	(56,738)				
IV. Recognition of Deferred (Inflow)/Outflow	2,168,071				
V. Expense Related to Change in Benefit Terms	<u>0</u>				
VI. Financial Statement Expense/(Income) (I. + II. + III. + IV. + V.)	8,662,949				
VII. Benefit Payments	(3,163,792)				
VIII. Contributions to Trust	(100,000)				
IX. Total Employer Payments (VII. + VIII.)	(3,263,792)				
X. Total Net OPEB Expense/(Income) under GASB 75 (VI. + IX.)	5,399,157				



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT A REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2021 Measurement Date)

The City's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which is composed of the service cost and an amortization of the unfunded liability. For FY 2021 and future years we have used a 30 year amortization increasing by 3.00% per year of the City's unfunded liability for the purpose of calculating ADC. The following table shows the components of the City's annual ADC and the amount actually contributed to the plan:

Actuarially Determi	ned Contribution - Do	eficiency / (Excess	s)				
		For the Fisca					
	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>	June 30, 2018	<u>June 30, 2017</u>		
I. Service Cost	3,141,029	3,030,651	2,417,544	2,423,566	3,005,942		
II. Amortization of NOL	<u>3,775,998</u>	4,789,012	4,502,293	4,906,120	<u>4,211,284</u>		
III. Actuarial Determined Contribution [I. + II.]	6,917,027	7,819,663	6,919,837	7,329,686	7,217,226		
IV. Contributions in Relation to the Actuarially Determined Contribution	(3,263,792)	(2,876,909)	(2,842,475)	(2,706,780)	(2,482,447)		
V. Contribution Deficiency / (Excess) [III. + IV.]	3,653,235	4,942,754	4,077,362	4,622,906	4,734,779		
Covered Employee Payroll	40,167,210	39,836,189	3,867,592	41,172,059	39,972,872		
Contributions as a % of Covered Employee Payroll	8.13%	7.22%	73.49%	6.57%	6.21%		
Discount Rate	4.25%	3.75%	4.50%	4.50%	3.50%		
Money Weighted Rate of Return	16.73%	1.97%	5.66%	9.53%	7.04%		



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2021 Measurement Date)

Schedule of Changes in the	City's Net OPEB Lia	bility and Related	l Ratios		
Valuation Date	July 1, 2020	July 1, 2018	July 1, 2018	July 1, 2016	July 1, 2016
GASB 75 Measurement Date	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
For the Reporting Period & Fiscal Year Ending on:	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
Total OPEB Liability	96,642,165	89,375,286	77,411,201	75,350,348	84,082,487
Total Of Eb Liability	90,042,103	69,373,260	77,411,201	75,550,546	04,002,407
I. Service Cost	3,141,029	3,030,651	2,417,544	2,423,566	3,005,942
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	3,410,587	3,555,865	3,437,638	3,430,587	2,885,278
III. Changes in Benefit Terms	0	0	0	0	0
IV. Difference Between Expected & Actual Plan Experience	(113,761)	(75,075)	(9,654,268)	(11,929,512)	0
V. Changes of Assumptions	3,992,816	8,329,553	8,642,414	0	0
VI. Benefit Payments Excluding Implicit Cost	(2,581,429)	(2,331,339)	(2,223,258)	(2,318,266)	(2,168,509)
VII. Implicit Cost Amount	(582,363)	(545,570)	(559,217)	(338,514)	(288,938)
VIII. Total Benefit Payments Including Implicit Cost [VI.+VII.]	(3,163,792)	(2,876,909)	(2,782,475)	(2,656,780)	(2,457,447)
IX. Net Change in OPEB Liability [I.+II.+III.+IV.+V.+VIII.]	7,266,879	11,964,085	2,060,853	(8,732,139)	3,433,773
X. Total OPEB Liability - Beginning of Period	89,375,286	77,411,201	75,350,348	84,082,487	80,648,714
XI. Prior Period Adjustment	0	0	0	0	0
XII. Total OPEB Liability - Beginning of Period with Adjustment	89,375,286	77,411,201	75,350,348	84,082,487	80,648,714
XIII. Total OPEB Liability - End of Period [IX.+XII.]	96,642,165	89,375,286	77,411,201	75,350,348	84,082,487
Plan Fiduciary Net Position	1,020,910	788,904	773,676	675,453	571,053
XIV. Earning from Plan Investments	132,006	15,228	38,223	54,400	66,510
XV. Employer Contribution to Trust	3,263,792	2,876,909	2,842,475	2,706,780	2,482,447
XVI. Benefit Payments from Trust, Including Refunds of Member Contributions	(3,163,792)	(2,876,909)	(2,782,475)	(2,656,780)	(2,457,447)
XVII. Administrative Expense	0	0	0	0	0
XVIII. Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
XIX. Net Change in Plan Fiduciary Net Position [XIV.+XV.+XVI.+XVII.+XVIII.]	232,006	15,228	98,223	104,400	91,510
XX. Plan Fiduciary Net Position - Beginning of Period	788,904	773,676	675,453	571,053	479,543
XXI. Prior Period Adjustment	0	0	0	0	0
XXII. Plan Fiduciary Net Position - Beginning of Period with Adjustment	788,904	773,676	675,453	571,053	479,543
XXIII. Plan Fiduciary Net Position - End of Period [XIX.+XXII.]	1,020,910	788,904	773,676	675,453	571,053
XXIV. Net OPEB Liability [XIIIXXIII.]	95,621,255	88,586,382	76,637,525	74,674,895	83,511,434
XXV. Plan Fiduciary Net Position as % of Total OPEB Liability [XXIII. / XIII.]	1.06%	0.88%	1.00%	0.90%	0.68%
XXVI. Covered Employee Payroll	40,167,210	39,836,189	3,867,592	41,172,059	39,972,872
XXVII. Plan NOL as % of Covered Employee Payroll [XXIV. / XXVI.]	238.06%	222.38%	1981.53%	181.37%	208.92%
Single Discount Rate to calculate Plan Liabilities	4.25%	3.75%	4.50%	4.50%	3.50%





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2021 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date: Actuarially Determined Contribution was calculated as of July 1, 2020.

Actuarial Cost Method: Individual Entry Age Normal

Asset-Valuation Method: Market Value of Assets as of the Measurement Date, June 30, 2021.

Actuarial Assumptions:

Investment Rate of Return: 6.77%, net of OPEB plan investment expense, including inflation.

Municipal Bond Rate 2.18% as of June 30, 2021 (source: S&P Municipal Bond 20-Year High Grade Index –

SAPIHG)

Single Equivalent Discount Rate: 4.25%, net of OPEB plan investment expense, including inflation.

Inflation: 2.50% as of June 30, 2021 and for future periods

Salary Increases: 3.00% annually as of June 30, 2021 and for future periods

Cost of Living Adjustment: Not Applicable





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2021 Measurement Date)

Pre-Retirement Mortality: General: RP-2014 Mortality Table for Blue Collar Employees projected generationally

with scale MP-2016 for males and females, set forward 1 year for females

Teachers: RP-2014 Mortality Table for White Collar Employees projected generationally

with scale MP-2016 for males and females

Post-Retirement Mortality: General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females, set forward 1 year for females

Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females

Disabled Mortality: General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females, set forward 1 year

Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2021 Measurement Date)

Plan Membership

At July 1, 2020, OPEB plan membership consisted of the following:

Inactive employees or beneficiaries currently receiving benefits:	522
Active Employees:	<u>589</u>
Total:	1,111

Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

Changes in Assumptions: From June 30, 2020 to June 30, 2021

- ✓ Due to the GASB 75 standards the discount rate has been changed from 3.75% to 4.25%
- ✓ Due to updated guidance related to the implementation of ASOP 6, we have updated our methodology for calculating expected claims
- ✓ Based on recent actuarial research we have adopted the Getzen model for future healthcare cost increases

Contributions/Withdrawals:

The contribution requirements of plan members and the City are established and may be amended through City ordinances. The City contributed \$100,000 beyond the pay-as-you-go cost for the period ending on the June 30, 2021 Measurement Date. For the year ending on the June 30, 2021 Measurement Date total City premiums plus implicit costs for the retiree medical program were \$3,163,792. \$582,363 of the \$3,163,792 represents implicit cost.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2021 Measurement Date)

Census Data Manipulation:

In the absence of data, the following was assumed:

Spouse Sex: Male participants had female spouses and vice versa.

Spouse Age: Male spouses were three years older than female spouses and same sex spouses were

the same age.

Hire Age: Participants who were not on the previous valuation were hired halfway between last

valuation and the current valuation. If we did not have census data related to the last

valuation, the participants were assumed to have been hired at age forty.

Retiree Age: Retirees had the same birth date as they had the prior valuation. If we did not have

census data related to the last valuation, retirees who were enrolled in Active plans

were assumed to be age sixty-two and retirees who were enrolled in Medicare Supplement plans were assumed to be age seventy-two. Those not enrolled in a

medical plan were assumed to be sixty-seven.

School Demographics: Two thirds of school participants were teachers.

Other Material Changes: No other data changes were deemed to be material.



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES

Table 1: Projection of Contributions using a July 1, 2020 Valuation Date

					V. Employer		
For the Period Ending	I. Payroll for		III. Total	IV. Contributions	Payments for	VI. Employer	VII. Total
on the Measurement	current	II. Payroll for	Payroll	from current	current plan	Payments for	Payments
Date	employees	future employees	[I.+II.]	employees	members	future employees	[IV.+V.+VI.]
June 30, 2021	40,167,210	0	40,167,210	0	3,163,792	0	3,163,792
June 30, 2022	37,176,998	4,195,228	41,372,226	0	3,355,909	0	3,355,909
June 30, 2023	34,737,441	7,875,952	42,613,393	0	3,466,575	0	3,466,575
June 30, 2024	32,444,868	11,446,927	43,891,795	0	3,754,527	0	3,754,527
June 30, 2025	30,285,850	14,922,699	45,208,549	0	3,913,239	0	3,913,239
June 30, 2026	28,466,508	18,098,297	46,564,805	0	4,136,620	0	4,136,620
June 30, 2027	26,646,467	21,315,282	47,961,749	0	4,382,983	0	4,382,983
June 30, 2028	24,983,441	24,417,160	49,400,601	0	4,649,188	0	4,649,188
June 30, 2029	23,314,188	27,568,431	50,882,619	0	4,863,455	0	4,863,455
June 30, 2030	21,859,902	30,549,196	52,409,098	0	5,104,349	0	5,104,349
June 30, 2031	20,296,745	33,684,626	53,981,371	0	5,405,575	0	5,405,575
June 30, 2032	18,965,810	36,635,002	55,600,812	0	5,564,420	21,819	5,586,239
June 30, 2033	17,787,146	39,481,690	57,268,836	0	5,774,233	55,155	5,829,388
June 30, 2034	16,614,188	42,372,713	58,986,901	0	5,966,214	101,160	6,067,374
June 30, 2035	15,660,467	45,096,041	60,756,508	0	6,104,754	166,387	6,271,141
June 30, 2036	14,679,927	47,899,276	62,579,203	0	6,204,401	247,716	6,452,117
June 30, 2037	13,821,928	50,634,651	64,456,579	0	6,385,706	298,577	6,684,283
June 30, 2038	13,065,912	53,324,364	66,390,276	0	6,608,184	360,945	6,969,129
June 30, 2039	12,272,950	56,109,034	68,381,984	0	6,695,147	434,034	7,129,181
June 30, 2040	11,582,637	58,850,807	70,433,444	0	6,788,162	483,274	7,271,436
June 30, 2041	10,910,945	61,635,502	72,546,447	0	6,890,053	539,238	7,429,291
June 30, 2042	10,303,795	64,419,045	74,722,840	0	6,900,209	633,819	7,534,028
June 30, 2043	9,712,541	67,251,984	76,964,525	0	6,785,689	760,089	7,545,778
June 30, 2044	9,139,276	70,134,185	79,273,461	0	6,762,534	915,861	7,678,395
June 30, 2045	8,620,927	73,030,738	81,651,665	0	6,781,226	1,115,133	7,896,359
June 30, 2046	8,135,096	75,966,119	84,101,215	0	6,751,376	1,351,038	8,102,414
June 30, 2047	7,528,063	79,096,188	86,624,251	0	6,716,783	1,525,664	8,242,447
June 30, 2048	6,989,499	82,233,480	89,222,979	0	6,693,908	1,725,643	8,419,551
June 30, 2049	6,523,093	85,376,575	91,899,668	0	6,739,894	1,949,627	8,689,521
June 30, 2050	5,991,327	88,665,331	94,656,658	0	6,646,180	2,124,062	8,770,242
June 30, 2051	5,358,718	92,137,640	97,496,358	0	6,542,246	2,312,714	8,854,960
June 30, 2052	4,732,192	95,689,057	100,421,249	0	6,542,363	2,550,731	9,093,094
June 30, 2053	4,204,875	99,229,011	103,433,886	0	6,516,044	2,817,494	9,333,538
June 30, 2054	3,597,444	102,939,459	106,536,903	0	6,306,452	3,109,859	9,416,311
June 30, 2055	3,017,374	106,715,636	109,733,010	0	6,304,765	3,441,913	9,746,678
June 30, 2056	2,513,458	110,511,542	113,025,000	0	6,177,749	3,804,990	9,982,739
June 30, 2057	2,100,203	114,315,547	116,415,750	0	5,991,421	4,139,340	10,130,761
June 30, 2058	1,646,499	118,261,724	119,908,223	0	5,913,354	4,491,550	10,404,904
June 30, 2059	1,220,760	122,284,710	123,505,470	0	5,764,272	4,864,058	10,628,330
June 30, 2060	918,332	126,292,302	127,210,634	0	5,663,438	5,226,331	10,889,769



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS</u>

CONTRIBUTION PROJECTION DISCLOSURES (CONTINUED)

Table 1: Projection of Contributions using a July 1, 2020 Valuation Date

					V. Employer		
For the Period Ending	I. Payroll for		III. Total	IV. Contributions	Payments for	VI. Employer	VII. Total
on the Measurement	current	II. Payroll for	Payroll	from current	current plan	Payments for	Payments
Date	employees	future employees	[I.+II.]	employees	members	future employees	[IV.+V.+VI.]
June 30, 2061	670,017	130,356,936	131,026,953	0	5,545,424	5,596,288	11,141,712
June 30, 2062	447,820	134,509,942	134,957,762	0	5,331,995	6,015,138	11,347,133
June 30, 2063	267,569	138,738,926	139,006,495	0	5,202,702	6,462,586	11,665,288
June 30, 2064	167,329	143,009,361	143,176,690	0	5,069,929	6,947,663	12,017,592
June 30, 2065	113,690	147,358,301	147,471,991	0	4,889,755	7,477,859	12,367,614
June 30, 2066	67,762	151,828,389	151,896,151	0	4,768,081	8,041,009	12,809,090
June 30, 2067	21,786	156,431,250	156,453,036	0	4,639,496	8,604,651	13,244,147
June 30, 2068	9,132	161,137,495	161,146,627	0	4,495,541	9,192,553	13,688,094
June 30, 2069	3,447	165,977,579	165,981,026	0	4,360,935	9,805,304	14,166,239
June 30, 2070	0	170,960,457	170,960,457	0	4,210,636	10,403,066	14,613,702
June 30, 2071	0	176,089,271	176,089,271	0	4,065,139	11,017,141	15,082,280
June 30, 2072	0	181,371,949	181,371,949	0	3,912,479	11,659,761	15,572,240
June 30, 2073	0	186,813,107	186,813,107	0	3,742,783	12,316,272	16,059,055
June 30, 2074	0	192,417,500	192,417,500	0	3,592,209	13,001,404	16,593,613
June 30, 2075	0	198,190,025	198,190,025	0	3,411,936	13,709,029	17,120,965
June 30, 2076	0	204,135,726	204,135,726	0	3,236,923	14,435,644	17,672,567
June 30, 2077	0	210,259,798	210,259,798	0	3,072,267	15,207,663	18,279,930
June 30, 2078	0	216,567,592	216,567,592	0	2,888,288	15,997,619	18,885,907
June 30, 2079	0	223,064,620	223,064,620	0	2,712,658	16,807,183	19,519,841
June 30, 2080	0	229,756,559	229,756,559	0	2,531,379	17,646,239	20,177,618
June 30, 2081	0	236,649,256	236,649,256	0	2,350,108	18,505,329	20,855,437
June 30, 2082	0	243,748,734	243,748,734	0	2,181,604	19,387,470	21,569,074
June 30, 2083	0	251,061,196	251,061,196	0	2,006,415	20,289,964	22,296,379
June 30, 2084	0	258,593,032	258,593,032	0	1,835,946	21,224,726	23,060,672
June 30, 2085	0	266,350,823	266,350,823	0	1,673,056	22,192,002	23,865,058
June 30, 2086	0	274,341,348	274,341,348	0	1,512,197	23,188,999	24,701,196
June 30, 2087	0	282,571,588	282,571,588	0	1,358,809	24,232,888	25,591,697
June 30, 2088	0	291,048,736	291,048,736	0	1,211,992	25,310,344	26,522,336
June 30, 2089	0	299,780,198	299,780,198	0	1,073,314	26,424,159	27,497,473
June 30, 2090	0	308,773,604	308,773,604	0	943,299	27,582,165	28,525,464
June 30, 2091	0	318,036,812	318,036,812	0	822,239	28,776,437	29,598,676
June 30, 2092	0	327,577,916	327,577,916	0	710,515	30,006,139	30,716,654
June 30, 2093	0	337,405,253	337,405,253	0	608,293	31,274,129	31,882,422
June 30, 2094	0	347,527,411	347,527,411	0	515,665	32,587,938	33,103,603
June 30, 2095	0	357,953,233	357,953,233	0	432,599	33,945,338	34,377,937



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS</u>

FIDUCIARY NET POSITION PROJECTION DISCLOSURES

		Table 2: Projecti	on of OPEB Plan	's Fiduciary Ne	t Position using a	Iuly 1, 2020 Valu	ation Date		
For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Employer Share of Benefit Payments for	III. Contributions to Trust for Current Plan Members beyond Pay-as-you- go	IV. Gross Contributions to Trust for Current Plan Members [II. + III.]	V. Administrative Expenses Withdrawn from the Trust for Current Plan Members	VI. Benefit Payments Withdrawn from the Trust for Current Plan Members	VII. Trust Withdrawals for Current Plan Members [V. +VI.]	VIII. Investment Earnings	IX. Ending Fiduciary Net Position for Current Plan Members
June 30, 2021	788,904	3,163,792	100,000	3,263,792	0	3,163,792	3,163,792	132,006	1,020,910
June 30, 2022	1,020,910	3,355,909	53,916	3,409,825	0	3,355,909	3,355,909	63,902	1,138,728
June 30, 2023	1,138,728	3,466,575	48,911	3,515,486	0	3,466,575	3,466,575	78,720	1,266,359
June 30, 2024	1,266,359	3,754,527	44,352	3,798,879	0	3,754,527	3,754,527	87,209	1,397,920
June 30, 2025	1,397,920	3,913,239	40,195	3,953,434	0	3,913,239	3,913,239	95,978	1,534,093
June 30, 2026	1,534,093	4,136,620	36,680	4,173,300	0	4,136,620	4,136,620	105,079	1,675,852
June 30, 2027	1,675,852	4,382,983	33,335	4,416,318	0	4,382,983	4,382,983	114,565	1,823,752
June 30, 2028	1,823,752	4,649,188	30,344	4,679,532	0	4,649,188	4,649,188	124,478	1,978,574
June 30, 2029	1,978,574	4,863,455	27,492	4,890,947	0	4,863,455	4,863,455	134,865	2,140,931
June 30, 2030	2,140,931	5,104,349	25,026	5,129,375	0	5,104,349	5,104,349	145,774	2,311,731
June 30, 2031	2,311,731	5,405,575	22,560	5,428,135	0	5,405,575	5,405,575	157,255	2,491,546
June 30, 2032	2,491,546	5,564,420	20,466	5,584,886	0	5,564,420	5,564,420	169,359	2,659,552
June 30, 2033	2,659,552	5,774,233	18,635	5,792,868	0	5,774,233	5,774,233	180,672	2,803,704
June 30, 2034	2,803,704	5,966,214	16,900	5,983,114	0	5,966,214	5,966,214	190,373	2,909,817
June 30, 2035	2,909,817	6,104,754	15,465	6,120,219	0	6,104,754	6,104,754	197,510	2,956,405
June 30, 2036	2,956,405	6,204,401	1,759,362	7,963,763	0	6,204,401	6,204,401	258,728	4,726,779
June 30, 2037	4,726,779	6,385,706	1,608,284	7,993,990	0	6,385,706	6,385,706	373,552	6,410,038
June 30, 2038	6,410,038	6,608,184	1,476,035	8,084,219	0	6,608,184	6,608,184	483,105	8,008,233
June 30, 2039	8,008,233	6,695,147	1,346,073	8,041,220	0	6,695,147	6,695,147	586,976	9,507,248
June 30, 2040	9,507,248	6,788,162	1,233,360	8,021,522	0	6,788,162	6,788,162	684,706	10,942,040
June 30, 2041	10,942,040	6,890,053	1,127,996	8,018,049	0	6,890,053	6,890,053	778,334	12,309,132
June 30, 2042	12,309,132	6,900,209	1,034,201	7,934,410	0	6,900,209	6,900,209	867,763	13,577,277
June 30, 2043	13,577,277	6,785,689	946,463	7,732,152	0	6,785,689	6,785,689	950,695	14,714,346
June 30, 2044	14,714,346	6,762,534	864,660	7,627,194	0	6,762,534	6,762,534	1,024,951	15,688,096
June 30, 2045	15,688,096	6,781,226	791,863	7,573,089	0	6,781,226	6,781,226	1,088,450	16,453,276
June 30, 2046	16,453,276	6,751,376	725,474	7,476,850	0	6,751,376	6,751,376	1,138,042	16,965,754
June 30, 2047	16,965,754	6,716,783	651,786	7,368,569	0	6,716,783	6,716,783	1,170,283	17,262,159
June 30, 2048	17,262,159	6,693,908	587,531	7,281,439	0	6,693,908	6,693,908	1,188,210	17,312,257
June 30, 2049	17,312,257	6,739,894	532,354	7,272,248	0	6,739,894	6,739,894	1,189,765	17,084,749
June 30, 2050	17,084,749	6,646,180	474,715	7,120,895	0	6,646,180	6,646,180	1,172,443	16,607,845
June 30, 2051	16,607,845	6,542,246	412,224	6,954,470	0	6,542,246	6,542,246	1,138,076	15,845,431
June 30, 2052	15,845,431	6,542,363	353,426	6,895,789	0	6,542,363	6,542,363	1,084,503	14,732,629
June 30, 2053	14,732,629	6,516,044	304,896	6,820,940	0	6,516,044	6,516,044	1,007,551	13,227,582
June 30, 2054	13,227,582	6,306,452	253,253	6,559,705	0	6,306,452	6,306,452	903,940	11,274,916
June 30, 2055	11,274,916	6,304,765	206,231	6,510,996	0	6,304,765	6,304,765	770,178	8,809,412
June 30, 2056	8,809,412	6,177,749	166,786	6,344,535	0	6,177,749	6,177,749	601,950	5,773,158
June 30, 2057	5,773,158	5,991,421	135,304	6,126,725	0	5,991,421	5,991,421	395,348	
June 30, 2057 June 30, 2058	2,164,470	5,991,421	102,985	6,016,339	0	5,913,354	5,991,421	395,348 149,964	2,164,470 252,949
June 30, 2059	2,164,470		74,132	5,838,404	0		, ,	19,593	93,725
June 30, 2039	252,949	5,764,272	74,132	5,838,404	0	5,764,272	5,764,272	19,593	93,725



8,148

93,725

5,663,438

June 30, 2060

5,717,580

0

5,663,438

5,663,438

54,142

11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

FIDUCIARY POSITION PROJECTION DISCLOSURES (CONTINUED)

		Table 2: Projecti			et Position using a	July 1, 2020 Valu			
For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Employer Share of Benefit Payments for Current Plan Members	III. Contributions to Trust for Current Plan Members beyond Pay-as-you- go	IV. Gross Contributions to Trust for Current Plan Members [II. + III.]	V. Administrative Expenses Withdrawn from the Trust for Current Plan Members	VI. Benefit Payments Withdrawn from the Trust for Current Plan Members	VII. Trust Withdrawals for Current Plan Members [V. +VI.]	VIII. Investment Earnings	IX. End Fiduciar Position for Plan Mer
June 30, 2061	62,290	5,545,424	38,352	5,583,776	0	5,545,424	5,545,424	5,49	4
June 30, 2062	43,846	5,331,995	24,887	5,356,882	0	5,331,995	5,331,995	3,79	7
June 30, 2063	28,684	5,202,702	14,437	5,217,139	0	5,202,702	5,202,702	2,42	3
June 30, 2064	16,860	5,069,929	8,765	5,078,694	0	5,069,929	5,069,929	1,43	3
June 30, 2065	10,198	4,889,755	5,782	4,895,537	0	4,889,755	4,889,755	88	3
June 30, 2066	6,665	4,768,081	3,346	4,771,427	0	4,768,081	4,768,081	56	3
June 30, 2067	3,909	4,639,496	1,044	4,640,540	0	4,639,496	4,639,496	29	9
June 30, 2068	1,343	4,495,541	425	4,495,966	0	4,495,541	4,495,541	10	5
June 30, 2069	530	4,360,935	156	4,361,091	0	4,360,935	4,360,935	4	1
June 30, 2070	197	4,210,636	0	4,210,636	0	4,210,636	4,210,636	1	3
June 30, 2071	13	4,065,139	0	4,065,139	0	4,065,139	4,065,139		1
June 30, 2072	1	3,912,479	0	3,912,479	0	3,912,479	3,912,479		0
June 30, 2073	0	3,742,783	0	3,742,783	0	3,742,783	3,742,783		0
June 30, 2074	0	3,592,209	0	3,592,209	0	3,592,209	3,592,209		0
June 30, 2075	0	3,411,936	0	3,411,936	0	3,411,936	3,411,936		0
June 30, 2076	0	3,236,923	0	3,236,923	0	3,236,923	3,236,923		0
June 30, 2077	0	3,072,267	0	3,072,267	0	3,072,267	3,072,267		0
June 30, 2078	0	2,888,288	0	2,888,288	0	2,888,288	2,888,288		0
June 30, 2079	0	2,712,658	0	2,712,658	0	2,712,658	2,712,658		0
June 30, 2080	0	2,531,379	0	2,531,379	0	2,531,379	2,531,379		0
June 30, 2081	0	2,350,108	0	2,350,108	0	2,350,108	2,350,108		0
June 30, 2082	0	2,181,604	0	2,181,604	0	2,181,604	2,181,604		0
June 30, 2083	0	2,006,415	0	2,006,415	0	2,006,415	2,006,415		0
June 30, 2084	0	1,835,946	0	1,835,946	0	1,835,946	1,835,946		0
June 30, 2085	0	1,673,056	0	1,673,056	0	1,673,056	1,673,056		0
June 30, 2086	0	1,512,197	0	1,512,197	0	1,512,197	1,512,197		0
June 30, 2087	0	1,358,809	0	1,358,809	0	1,358,809	1,358,809		0
June 30, 2088	0	1,211,992	0	1,211,992	0	1,211,992	1,211,992		0
June 30, 2089	0	1,073,314	0	1,073,314	0	1,073,314	1,073,314		0
June 30, 2090	0	943,299	0	943,299	0	943,299	943,299		0
June 30, 2091	0	822,239	0	822,239	0	822,239	822,239		0
June 30, 2092	0	710,515	0	710,515	0	710,515	710,515		0 🖊
June 30, 2093	0	608,293	0	608,293	0	608,293	608,293		0
June 30, 2094	0	515,665	0	515,665	0	515,665	515,665		0
June 30, 2095	0	432,599	0	432,599	0	432,599	432,599		0



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS</u>

BENEFIT PAYMENT PROJECTION DISCLOSURES

Table 3: Actuarial Present Values	Projected Benefit Payments using	a July 1, 2020 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit Payments for Current Plan Members	III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments [II III.]	V. Present Value of Funded Benefit Payments using the Long-Term Rate of Return [6.77%]	VI. Present Value of Unfunded Benefit Payments using the Municipal Bond Rate [2.18%]	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [4.08%]	
June 30, 2021	788,904	3,163,792	788,904	2,374,888	788,904	2,374,888	3,163,792	Sum of Column V.
June 30, 2022	1,020,910	3,355,909	1,020,910	2,334,999	956,177	2,285,223	3,224,437	45,042,200
June 30, 2023	1,138,728	3,466,575	1,138,728	2,327,847	998,899	2,229,658	3,200,280	
June 30, 2024	1,266,359	3,754,527	1,266,359	2,488,168	1,040,421	2,332,413	3,330,322	Sum of Column VI.
June 30, 2025	1,397,920	3,913,239	1,397,920	2,515,319	1,075,686	2,307,601	3,335,117	78,078,709
June 30, 2026	1,534,093	4,136,620	1,534,093	2,602,527	1,105,619	2,336,710	3,387,381	
June 30, 2027	1,675,852	4,382,983	1,675,852	2,707,131	1,131,202	2,378,815	3,448,513	Sum of Column VII.
June 30, 2028	1,823,752	4,649,188	1,823,752	2,825,436	1,152,978	2,429,846	3,514,656	[V. + VI.]
June 30, 2029	1,978,574	4,863,455	1,978,574	2,884,881	1,171,543	2,428,081	3,532,599	123,120,909
June 30, 2030	2,140,931	5,104,349	2,140,931	2,963,418	1,187,297	2,441,013	3,562,324	, ,
June 30, 2031	2,311,731	5,405,575	2,311,731	3,093,844	1,200,729	2,494,121	3,624,755	
June 30, 2032	2,491,546	5,564,420	2,491,546	3,072,874	1,212,069	2,424,408	3,585,092	
June 30, 2033	2,659,552	5,774,233	2,659,552	3,114,681	1,211,763	2,405,008	3,574,525	
June 30, 2034	2,803,704	5,966,214	2,803,704	3,162,510	1,196,443	2,389,883	3,548,678	
June 30, 2035	2,909,817	6,104,754	2,909,817	3,194,937	1,162,991	2,362,920	3,488,828	
June 30, 2036	2,956,405	6,204,401	2,956,405	3,247,996	1,106,688	2,350,954	3,406,865	
June 30, 2037	4,726,779	6,385,706	4,726,779	1,658,927	1,657,209	1,175,162	3,369,052	
June 30, 2038	6,410,038	6,608,184	6,410,038	198,146	2,104,861	137,372	3,349,844	
June 30, 2039	8,008,233	6,695,147	6,695,147	0	2,059,083	0	3,260,966	
June 30, 2040	9,507,248	6,788,162	6,788,162	0	1,955,314	0	3,176,742	
June 30, 2041	10,942,040	6,890,053	6,890,053	0	1,858,822	0	3,098,104	
June 30, 2042	12,309,132	6,900,209	6,900,209	0	1,743,525	0	2,981,119	
June 30, 2043	13,577,277	6,785,689	6,785,689	0	1,605,871	0	2,816,792	
June 30, 2044	14,714,346	6,762,534	6,762,534	0	1,498,915	0	2,697,205	
June 30, 2045	15,688,096	6,781,226	6,781,226	0	1,407,753	0	2,598,701	
June 30, 2046	16,453,276	6,751,376	6,751,376	0	1,312,687	0	2,485,903	
June 30, 2047	16,965,754	6,716,783	6,716,783	0	1,223,154	0	2,376,276	
June 30, 2048	17,262,159	6,693,908	6,693,908	0	1,141,695	0	2,275,406	
June 30, 2049	17,312,257	6,739,894	6,739,894	0	1,076,649	0	2,201,283	
June 30, 2050	17,084,749	6,646,180	6,646,180	0	994,361	0	2,085,636	
June 30, 2051	16,607,845	6,542,246	6,542,246	0	916,747	0	1,972,591	
June 30, 2052	15,845,431	6,542,363	6,542,363	0	858,634	0	1,895,346	
June 30, 2053	14,732,629	6,516,044	6,516,044	0	800,955	0	1,813,767	
June 30, 2054	13,227,582	6,306,452	6,306,452	0	726,039	0	1,686,655	
June 30, 2055	11,274,916	6,304,765	6,304,765	0	679,821	0	1,620,145	
June 30, 2056	8,809,412	6,177,749	6,177,749	0	623,888	0	1,525,312	
June 30, 2057	5,773,158	5,991,421	5,991,421	0	566,705	0	1,421,353	
June 30, 2058	2,164,470	5,913,354	2,923,730	2,989,624	259,009	1,346,999	1,347,876	
June 30, 2059	252,949	5,764,272	903,402	4,860,870	74,957	2,143,416	1,262,421	
June 30, 2060	93,725	5,663,438	657,838	5,005,600	51,121	2,160,183	1,191,745	



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS</u>

BENEFIT PAYMENT PROJECTION DISCLOSURES (CONTINUED)

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit Payments for Current Plan Members	III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments [II III.]	V. Present Value of Funded Benefit Payments using the Long-Term Rate of Return [6.77%]	VI. Present Value of Unfunded Benefit Payments using the Municipal Bond Rate [2.18%]	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [4.08%]
June 30, 2061	62,290	5,545,424	537,044	5,008,380	39,088	2,115,308	1,121,196
June 30, 2062	43,846	5,331,995	402,928	4,929,067	27,467	2,037,431	1,035,811
June 30, 2063	28,684	5,202,702	325,579	4,877,123	20,787	1,972,985	971,098
June 30, 2064	16,860	5,069,929	264,955	4,804,974	15,844	1,902,362	909,243
June 30, 2065	10,198	4,889,755	203,956	4,685,799	11,423	1,815,631	842,575
June 30, 2066	6,665	4,768,081	180,805	4,587,276	9,484	1,739,565	789,421
June 30, 2067	3,909	4,639,496	151,024	4,488,472	7,420	1,665,813	738,040
June 30, 2068	1,343	4,495,541	118,735	4,376,806	5,463	1,589,743	687,123
June 30, 2069	530	4,360,935	96,334	4,264,601	4,152	1,515,968	640,436
June 30, 2070	197	4,210,636	61,964	4,148,672	2,501	1,443,320	594,138
June 30, 2071	13	4,065,139	31,684	4,033,455	1,198	1,373,323	551,13
June 30, 2072	1	3,912,479	5,344	3,907,135	189	1,301,954	509,65
June 30, 2073	0	3,742,783	0	3,742,783	0	1,220,601	468,45
June 30, 2074	0	3,592,209	0	3,592,209	0	1,146,523	431,99
June 30, 2075	0	3,411,936	0	3,411,936	0	1,065,771	394,23
June 30, 2076	0	3,236,923	0	3,236,923	0	989,549	359,36
June 30, 2077	0	3,072,267	0	3,072,267	0	919,191	327,72
June 30, 2078	0	2,888,288	0	2,888,288	0	845,725	296,02
June 30, 2079	0	2,712,658	0	2,712,658	0	777,366	267,13
June 30, 2080	0	2,531,379	0	2,531,379	0	709,953	239,51
June 30, 2081	0	2,350,108	0	2,350,108	0	645,063	213,65
June 30, 2082	0	2,181,604	0	2,181,604	0	586,047	190,56
June 30, 2083	0	2,006,415	0	2,006,415	0	527,496	168,39
June 30, 2084	0	1,835,946	0	1,835,946	0	472,389	148,05
June 30, 2085	0	1,673,056	0	1,673,056	0	421,301	129,63
June 30, 2086	0	1,512,197	0	1,512,197	0	372,677	112,57
June 30, 2087	0	1,358,809	0	1,358,809	0	327,736	97,19
June 30, 2088	0	1,211,992	0	1,211,992	0	286,093	83,29
June 30, 2089	0	1,073,314	0	1,073,314	0	247,957	70,87
June 30, 2090	0	943,299	0	943,299	0	213,276	59,85
June 30, 2091	0	822,239	0	822,239	0	181,941	50,12
June 30, 2092	0	710,515	0	710,515	0	153,868	41,61
June 30, 2093	0	608,293	0	608,293	0	128,923	34,23
June 30, 2094	0	515,665	0	515,665	0	106,961	27,88
June 30, 2095	0	432,599	0	432,599	0	87,819	22,47





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX II – PLAN PROVISIONS</u>

<u>Plan Year</u> July 1 through June 30.

<u>Premium Effective Date</u> Medicare Supplement Plans: effective January 1, 2021

Active Plans: effective July 1, 2021 **Dental Plans:** effective July 1, 2021

<u>Creditable Service</u> Elapsed time from date of hire to termination of service date.

Benefits Offered Medical, Dental and \$5,000 of Group Term Life Insurance.

Medicare Part A premiums and penalties for a select group of retirees

who would have otherwise been ineligible for Medicare. These payments were reflected

in the valuation.

Medicare Part B Premium reimbursements by the City were not reflected in this

valuation.

Medicare Part B Penalty reimbursements have been reflected.

<u>Surviving Spouse Coverage</u> Spousal benefits do not change after the death of a plan participant.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX II – PLAN PROVISIONS</u>

Eligibility

Hire Date	Eligibility	
Refere April 2 2012	• Age 55 with 10 years of creditable service	
Before April 2, 2012	•20 years of service regardless of age	
On or after April 2, 2012	• Age 60 with 10 years of creditable service	

Participant Contributions

Group	Individual	Two-Person / Family
Medical	25%	25%
Dental	100%	100%
Life	10%	N/A



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Sui

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX III - ACTUARIAL METHODS & ASSUMPTIONS

<u>Pre-Retirement Mortality</u> General: RP-2014 Mortality Table for Blue Collar Employees projected generationally

with scale MP-2016 for males and females, set forward 1 year for females

Teachers: RP-2014 Mortality Table for White Collar Employees projected generationally

with scale MP-2016 for males and females

Post-Retirement Mortality General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females, set forward 1 year for females

Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females

<u>Disabled Mortality</u> General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females, set forward 1 year

Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected

generationally with scale MP-2016 for males and females

<u>Assumption Experience Study</u> The actuarial assumptions used to calculate the actuarial accrued liability and the

service cost primarily reflect the latest experience studies of the Massachusetts PERAC issued in 2014 and their most recent analysis of retiree mortality during 2015 and 2016.

<u>Discount Rate</u> 4.25% per annum (previously 3.75%)

Net Long Term Rate of Return 6.77% (based on investment policy)

Municipal Bond Rate 2.18% as of June 30, 2021 (source: S&P Municipal Bond 20-Year High Grade Index –

SAPIHG)

<u>Actuarial Cost Method</u> Individual Entry Age Normal

<u>Asset-Valuation Method</u> Market Value of Assets as of the Measurement Date, June 30, 2021





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Employee Termination

It was assumed that employees would terminate employment in accordance with the sample rates shown in the following table:

Service	Male	Female
0	15.00%	15.00%
5	7.60%	7.60%
10	5.40%	5.40%
15	3.30%	3.30%
20	2.00%	2.00%



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS</u>

Retirement Rates for Eligible Employees

	Standard	Standard	Male	Female
Age	Male	Female	Teachers	Teachers
45 - 49	0.00%	0.00%	0.00%	0.00%
50 - 51	3.00%	3.00%	2.00%	1.50%
52	3.00%	3.00%	2.00%	1.50%
53	3.00%	3.00%	2.00%	1.50%
54	3.00%	3.50%	2.00%	2.00%
55	3.50%	5.00%	6.00%	5.00%
56	3.50%	5.00%	20.00%	15.00%
57	4.00%	5.50%	40.00%	35.00%
58	5.00%	6.00%	50.00%	35.00%
59	6.00%	6.50%	50.00%	35.00%
60	9.00%	7.50%	40.00%	35.00%
61	11.00%	10.00%	40.00%	35.00%
62	15.00%	15.00%	35.00%	35.00%
63	15.00%	15.00%	35.00%	35.00%
64	16.00%	15.00%	35.00%	35.00%
65	20.00%	20.00%	35.00%	35.00%
66	20.00%	20.00%	40.00%	35.00%
67	20.00%	20.00%	40.00%	30.00%
68	20.00%	20.00%	40.00%	30.00%
69	20.00%	20.00%	40.00%	30.00%
70	100.00%	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%	100.00%

Permanent Disability Rates

Age	Standard	Teachers
20	0.01%	0.05%
30	0.01%	0.07%
40	0.07%	0.21%
50	0.13%	0.42%
60	0.12%	0.50%



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Trend Rate

Medicare Part A & B Premiums & Penalties: Assumed to rise at the same rates as our Medical Plan trend assumption.

Medical & Dental Plans: Rates were developed using the SOA Getzen Model of Long-Run Medical Cost Trends with the following model input variables:

Inflation (CPI):	2.50%
Real GDP (per capita):	1.10%
Excess Medical Cost Growth:	1.10%
Expected Health Share of GDP in 2029:	20%
Health Share of GDP Resistance Point:	22.5%
Year for Limiting Cost Growth to GDP Growth:	2060

See below for a table of trend rates for select years:

Year	Rate
2020 - 2023	4.50%
2024	4.54%
2025	4.59%
2026	4.63%
2027	4.68%
2028	4.72%
2029 - 2040	4.77%
2045	4.53%
2050	4.43%
2055	4.00%
2060	3.63%
2061+	3.60%





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Participation Rate It was assumed that 80% of employees eligible to receive retirement benefits would

enroll in the retiree medical plans upon retirement. For life insurance plans, it was

assumed that 80% of eligible employees would elect coverage upon retirement.

Spouse Participation Rate It was assumed that 80% of male employees and 70% of female employees who elect

retiree healthcare coverage for themselves would also elect coverage for a spouse upon

retirement.

Medicare Eligibility It was assumed that retirees who were over age 66 on the valuation date and were

enrolled in an Active plan were ineligible for Medicare and all other participants would

be eligible for Medicare at age 65, absent any information to the contrary.

Compensation Increases 3.00% per year.

Inflation Rate 2.50% per year.

COVID-19 We recognize that COVID-19 may impact plan experience. We have reviewed the

> assumptions used in this report. Based on the data that is currently available, we have not made any adjustments to these assumptions to reflect the impact of COVID-19. We will continue to monitor the impact of COVID-19 to determine if adjustments to

valuation assumptions are warranted.



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Implicit Subsidy

The implicit subsidy arises because retirees who are not eligible for Medicare are charged the same premium as active employees, even though their actual medical costs are higher on average. Consequently, a portion of the premiums being paid for active employees are being used to "subsidize" the premiums of retirees. Actuarial Standards of Practice and GASB standards require the liability associated with this implicit subsidy to be valued. The chart below shows a breakdown of how implicit cost impacts reported cash flows and liabilities. Actuarial Standard of Practice No. 6 ("ASOP 6") requires us to recognize this implicit subsidy while the plan sponsor may only pay the premiums billed by an insurance provider.

Impact of Implicit Subsidy				
As of the Measurement Date				
Impact on Liability June 30, 2021 June 30, 2021				
I. Total OPEB Liability	96,642,165	89,375,286		
II. Total OPEB Liability (Excluding Implicit Subsidy)	<u>75,761,817</u>	<u>77,524,271</u>		
III. Liability from Implicit Subsidy [I II.]	20,880,348	11,851,015		

	For the Measurement Period Ending				
Impact on Payments	<u>June 30, 2021</u> <u>June 30, 2020</u>				
IV. Employer Payments (Including Implicit Subsidy)	3,163,792	2,876,909			
V. Actual Employer Payments	<u>2,581,429</u>	<u>2,331,339</u>			
VI. Implicit Subsidy [IV V.]	582,363 545,5				



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Pre-65 and post-65 per capita costs were developed using fully insured premium rates.

ANNUAL PER CAPITA CLAIMS*

ACTIVE EMPLOYEES								
Age Bracket Female Male								
24 & Under	4,875	3,073						
25 to 29	7,191	3,198						
30 to 34	9,087	4,013						
35 to 39	9,361	5,039						
40 to 44	9,581	6,278						
45 to 49	10,524	7,927						
50 to 54	12,380	10,440						
55 to 59	14,312	13,572						
60 to 64	17,031	17,417						
65 to 69	20,415	21,725						
70 & Over	24,075	26,034						

RETIREE - NOT MEDICARE									
ELIGIBLE									
Age Bracket Female Male									
44 & Under	10,012	6,561							
45 to 49	10,998	8,284							
50 to 54	12,937	10,910							
55 to 59	14,956	14,183							
60 to 64	17,797	18,201							
65 to 69	21,334	22,703							
70 to 74	25,158	27,206							
75 to 79	29,217	32,132							
80 to 84	33,499	36,934							
85 to 89	38,239	42,276							
90 & Over	38,239	42,276							

RETIREE - MEDICARE ELIGIBLE								
Age Bracket	Female	Male						
65 to 69	2,914	2,992						
70 to 74	3,438	3,585						
75 to 79	3,988	4,234						
80 to 84	4,574	4,867						
85 to 89	5,113	5,422						
90 & Over	5,113	5,422						



^{*}Based on SOA 'Health Care Costs--From Birth to Death' study published in 2013

11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS</u>

Open Group Forecast

For the projection of plan liabilities in future years, it was assumed that the number of active employees will remain constant and those who terminate employment or retire will be replaced with new employees with the demographics below:

Open Group Forecast Population Demographics							
Age Male Female							
20	8.0%	5.0%					
30	7.0%	14.0%					
40	20.0%	19.0%					
50	10.0%	10.0%					
60	3.0%	<u>4.0%</u>					
Total	48.0%	52.0%					

Additional Comments

The liabilities being reported as of the Measurement Date of June 30, 2021 reflect a closed group and do not reflect any new entrants after the valuation date.

To the best of our knowledge all employees who are eligible on the valuation date are included in the actuarial valuation.



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX IV – PLAN DEMOGRAPHICS</u>

Active Employees

Valuation Date	July 1, 2020	July 1, 2018
A. Average Age at Hire	36.73	37.14
B. Average Service	<u>10.43</u>	<u>10.18</u>
C. Average Current Age	47.16	47.32

Retired Employees & Spouses

Valuation Date	July 1, 2020	July 1, 2018
A. Under Age 65	90	99
B. Age 65 & Over	<u>432</u>	<u>390</u>
C. Total	522	489

Average Service Age

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-24	16	1								17
25-29	29	4								33
30-34	41	16	3							60
35-39	29	19	17	1						66
40-44	21	15	21	13	1					71
45-49	22	19	10	13	11	2				77
50-54	17	17	9	10	16	6	4			79
55-59	23	11	20	18	10	6	6	2		96
60-64	11	11	13	19	6	5	2	1	1	69
65-69	4	2		3	5	2				16
70+		1	1	1		1			1	5
Total	213	116	94	78	49	22	12	3	2	589



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

2,159.06

178.26

605.00

671.20

101.86

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX IV – PLAN DEMOGRAPHICS</u>

<u>Plan Offerings</u>	Number of Contracts				
	<u>Single</u>	Two-Person	<u>Family</u>	<u>Total</u>	
HMO Blue NE	127		253	380	
PPO Blue	18		78	96	
HMO Limited Network	7		4	11	
Medex 2 LIS	1			1	
Medex 2	<u>167</u>	<u>134</u>		<u>301</u>	
Total	320	134	335	789	
		Per Contract Cos	ts (monthly)		
	<u>Single</u>	Two-Person	<u>Family</u>		
HMO Blue NE	886.05		2,321.58		
PPO Blue	1,028.89		2,696.01		

824.02

302.50

335.60

50.94

HMO Limited Network

Medex 2 LIS

Altus Dental Low

Medex 2



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080

West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX IV – PLAN DEMOGRAPHICS</u>

		Active Plan Average Premium Calculation						
	Single	Single Two-Person Family Participants Paid Child						
HMO Blue NE	127		253	633	8,398,657.08	6,730,435.80		
PPO Blue	18		78	174	2,745,705.60	2,148,322.32		
HMO Limited Network	7		4	15	172,852.56	148,323.60		
Total	152	0	335	822	11,317,215.24	9,027,081.72		
		Blended Average Monthly Rate: \$						

		Medicare Supplement Plan Average Premium Calculation						
		Single Two-Person Family Participants Paid Childs						
Medex 2 LIS		1			1	3,630.00		3,630.00
Medex 2		167	134		435	1,751,832.00		1,751,832.00
Total		168	134	0	436	36 1,755,462.00		1,755,462.00
	.			Blended Average Monthly Rate: \$				335.50



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX V – OVERVIEW OF GASB 74 & 75

Before Statements 74 and 75, GASB statement 45 established the reporting standards for Other Postemployment Benefit ("OPEB") plans. It was designed to recognize the Other Postemployment Benefits earned by employees throughout their working career vs. when they are paid in retirement – accrual accounting vs. "pay-as-you-go" accounting. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a "Service Cost". These amounts are reflected in your financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment.

In 2012 GASB issued GASB Statements 67 and 68 to update and standardize the financial reporting of pension liabilities. This increased the transparency of pension liabilities by moving them to the balance sheet and made financial statement disclosures of pension liabilities more comparable between municipal entities. GASB Statements 74 and 75 are designed to have the same effect on OPEB plans.

GASB 74 and 75 require retiree medical plans to disclose information about asset and liability levels and show historical contribution information. GASB 74 only applies in situations where a separate trust is established to prefund these benefits. GASB 75 requires employers to perform periodic actuarial valuations to determine annual accounting costs and to keep a running tally of the extent to which these amounts are over or under funded.

GASB 74 and 75 apply to those benefits provided after retirement, except for pension benefits, such as medical, dental and life insurance. The philosophy behind the accounting standard is that these postemployment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 74 and 75 extend this practice to all other postemployment benefits.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX V – OVERVIEW OF GASB 74 & 75

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

<u>Turnover and retirement rates</u> – How likely is it that an employee will qualify for postemployment benefits and when will they start?

<u>Medical inflation and claims cost assumptions</u> – When an employee starts receiving postemployment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption – How long is a retiree likely to receive benefits?

<u>Discount rate assumption</u> – What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the City, the present value is divided into three pieces: the part that is attributed to past years (the "Total OPEB Liability" or "Past Service Liability"), the part that is being earned this year (the "Service Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Service Cost have been calculated, the next step is to determine an actuarially determined contribution. This is an amount that if paid annually would fully prefund the benefits for current active and retired employees. This consists of two pieces:

- ✓ Service Cost because the benefits earned by active employees each year should be paid for each year
- ✓ Past Service Cost a catch-up payment to fund the Accrued Liability over a period of time determined by an actuary

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the City's financial statements as the Net OPEB Liability (NOL). If you decide to fully fund the NOL this will appear in the financial statement as a Net OPEB Asset. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

APPENDIX VI – ASOP 41 DISCLOSURES

The Actuarial Standards Board (the "ASB"), vested by the U.S.-based actuarial organizations¹, promulgates actuarial standards of practice ("ASOPs") for use by actuaries when providing professional services in the United States. Each of these organizations requires its members, through its Code of Professional Conduct², to observe the ASOPs of the ASB when practicing in the United States.

The ASOPs are not narrowly prescriptive and neither dictate a single approach nor mandate a particular outcome. ASOPs are intended to provide actuaries with a framework for performing professional assignments and to offer guidance on relevant issues, recommended practices, documentation, and disclosure. Each ASOP articulates a process of analysis, documentation, and disclosure that, in the ASB's judgment, constitutes appropriate practice within the scope and purpose of the ASOP.

ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in this Appendix.

<u>Identification of the Responsible Actuary</u>

The responsible actuary is Parker Elmore, ASA, EA, FCA, MAAA of Odyssey Advisors. This actuary is available to provide supplementary information and explanation.

<u>Identification of Actuarial Documents</u>

The date of this document is October 6, 2021 and its subject is the City of Newburyport's GASB 75 OPEB liabilities.



¹The American Academy of Actuaries (the "Academy"), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

² These organizations adopted identical Codes of Professional Conduct effective January 1, 2001



11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast

1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

<u>APPENDIX VI – ASOP 41 DISCLOSURES</u>

Disclosures in Actuarial Reports

- ✓ The contents of this report are intended for the use of the officers, employees, and elected officials of the City and the City's appointed auditor. The City may distribute this report to those parties that have a legal right to require the City to provide it, in which case it will be provided in its entirety including all assumptions, caveats, and limitations. In addition, we request that the City notify Odyssey Advisors to whom it was distributed.
- ✓ The purpose of this engagement was to provide the City with analysis of the GASB 75 OPEB liabilities.
- ✓ The responsible actuary identified above is qualified as specified in the *Qualification Standards* of the American Academy of Actuaries.
- ✓ Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.
- ✓ Actuarial computations under GASB 75 are for purposes of fulfilling financial accounting requirements of the City.

 Determinations for purposes other than meeting these financial accounting requirements may be significantly different from the results contained in this report. These communications should not be relied upon for any other purpose.
- ✓ The City of Newburyport has agreed to pay Odyssey Advisors a fee for preparing this report. Other than with regard to that contract, we are financially and organizationally independent from the City and any entity or individual related to the City. There is nothing in our relationship with the City that would impair or seem to impair the objectivity of our work.
- ✓ The City provided the employee/retiree data, premium rates and other information used to prepare our report. We have reviewed the data for reasonableness but have not audited it. To the extent that there are material inaccuracies in the data, our results may be accordingly affected.
- ✓ The date through which data or other information has been considered in developing the findings included in this report is June 30, 2021.
- ✓ The various documents comprising the actuarial report are contained within the document to which these disclosures are attached.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

APPENDIX VI – ASOP 41 DISCLOSURES

Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

<u>Actuarial Findings</u>

The actuarial findings of the report can be found in the report to which these disclosures are attached.

Methods, Procedures, Assumptions, and Data

The methods, procedures, assumptions and data used by the actuary can be found in the report to which these disclosures are attached.

Assumptions or Methods Prescribed by Law

While not legally binding, our determinations were made in accordance with our understanding of Statement No. 75 of the Governmental Accounting Standards Board. Actuarial computations under GASB 75 are for purposes of fulfilling employer accounting requirements. Determinations for purposes other than meeting such requirements may be significantly different from these results. Accordingly, additional determinations may be needed for other purposes.

Responsibility for Assumptions and Methods

The actuary does not disclaim responsibility for any material assumption(s) or method(s).

Deviation from the Guidance of an ASOP

The actuary has not deviated materially from the guidance set forth in an applicable ASOP.

Rounding

Results in this report are shown to the nearest dollar. Due to the predictive nature of these results, no implication is made as to the degree of precision in these unrounded figures. Clients should work with their auditors to decide if it would be prudent to round these results when applying them to the financial statements.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119

GLOSSARY

<u>Accrual Accounting</u> – A system of accounting in which revenues are recorded when earned and outlays are recorded when goods are received or services performed, even though the actual receipt of revenues and payment for goods or services may occur, in whole or in part, at a different time.

<u>Actuarially Determined Contribution</u> – Amount of funding required annually to fully fund plan benefits. Determined by the actuary using a consistent methodology.

Amortization - Allows the recognition of liability over a fixed period of time.

<u>Cash Basis Accounting</u> – A system of accounting in which revenues are recorded when received and outlays are recorded when payment is made.

<u>Deferred Inflows/Outflows of Resources</u> – Amounts arising from experience gains and losses that have not been recognized into the OPEB Expense but will be recognized in the future.

<u>Discount Rate</u> – The interest rate used to calculate the present value of future cash flows. Under GASB 75, the rate should be the expected long-term rate of return on investments for a plan that is being fully funded, the 20-year municipal bond index for a pay-as-you-go plan, and a blend of the two rates for a plan that is being partially funded.

<u>Entry Age Normal</u> – Under this method, the annual service cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement. The annual service cost for each active member is a level percent of payroll. The total OPEB liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

<u>Fiduciary Net Position</u> – The value of cash, investments, other assets and property belonging to an OPEB trust.





11 Hayward Ave, Building 4 Colchester, CT 06415 (860) 537-9080 West Coast 1350 E. Flamigo Road, Suite 254 Las Vegas, NV 89119 (702) 979-2880

GLOSSARY

Government Accounting Standards Board (GASB) – "The Governmental Accounting Standards Board (GASB) was organized in 1984 by the Financial Accounting Foundation (FAF) to establish standards of financial accounting and reporting for state and local governmental entities. Its standards guide the preparation of external financial reports of those entities."

<u>Implicit Subsidy</u> – The liability that arises because retirees who are not eligible for Medicare are charged the same premium as active employees even though their actual medical costs are higher on average.

<u>Irrevocable Contribution</u> – The transfer of assets to a qualified trust in which assets may only be withdrawn for the purpose of providing retiree other postemployment benefits.

Net OPEB Liability (NOL) – Total OPEB Liability less the Fiduciary Net Position.

<u>Other Postemployment Benefits (OPEB)</u> – Benefits that an employee will begin to receive at the start of retirement. This does not include pension benefits paid to the retired employee.

<u>OPEB Trust</u> – An entity which holds assets for the sole purpose of funding OPEB. All contributions and earning within this entity must be irrevocable and protected from creditors.

<u>Pay-as-you-go funding</u> – Paying benefits (such as pensions or OPEB) on a cash basis, with no money set aside for future liabilities which are already incurred.

<u>Service Cost</u> – The actuarially determined present value contribution needed to fund benefits which are earned for employee service rendered during the current year. Service cost depends on many factors, including the interest rate used to discount future cashflows, and expected inflation.

<u>Total OPEB Liability (TOL)</u> – That portion, as determined by the Individual Entry Age Normal Actuarial Cost Method, of the Actuarial Present Value of benefits and expenses which are not provided for by future Service Costs.

