

# Town of North Attleborough Other Postemployment Benefits Plan

## GASB 74 & GASB 75 Actuarial Valuation

With a Valuation Date of July 1, 2021

As of the Measurement Date:  
June 30, 2022

For the Reporting Date:  
June 30, 2022

Delivered December 23, 2022



TABLE OF CONTENTS

	<u>PAGE</u>
<u>EXECUTIVE SUMMARY</u>	I
<u>PRINCIPAL RESULTS OF THE VALUATION</u>	1
<u>EXHIBITS</u>	
A    FINANCIAL STATEMENT DISCLOSURES	4
B    REQUIRED SUPPLEMENTARY INFORMATION	16
<u>APPENDIX</u>	
I    LIABILITIES, ASSETS, & CASH FLOWS	22
II   PLAN PROVISIONS	27
III  ACTUARIAL METHODS & ASSUMPTIONS	30
IV  PLAN DEMOGRAPHICS	39
V   OVERVIEW OF GASB 74 & 75	44
VI  ASOP 41 DISCLOSURES	46
<u>GLOSSARY</u>	49



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

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

December 23, 2022

*Personal and Confidential*

Mr. Christopher Sweet  
Treasurer  
Town of North Attleborough  
43 S. Washington Street  
North Attleboro, MA 02760

Dear Mr. Sweet:

We have performed an actuarial valuation of the Town of North Attleborough Other Postemployment Benefits Plan for the Reporting Date & Fiscal Year Ending June 30, 2022 with a Measurement Date of June 30, 2022 and a Valuation Date of July 1, 2021. The figures presented in this report reflect the adoption, by the Town of North Attleborough, of Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75").

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,

A handwritten signature in black ink, appearing to read 'P. Elmore', written over a light blue horizontal line.

Parker E. Elmore, ASA, EA, FCA, MAAA  
President, CEO & Actuary



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

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

December 23, 2022

### ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of North Attleborough other postemployment benefit programs with a Valuation Date of July 1, 2021 with a Measurement Date of June 30, 2022 for the Reporting Date & Fiscal Year Ending June 30, 2022 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 Town and on participant claims or premium data provided by the Town and/or vendors employed by the Town.

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 Town are reasonably related to the experience and expectations of the postemployment benefits programs.

A handwritten signature in black ink, appearing to read 'P. Elmore', written over a light blue horizontal line.

---

Parker E. Elmore, ASA, EA, FCA, MAAA  
President, CEO & Actuary

## EXECUTIVE SUMMARY

### How did plan liabilities change from FY 21 to FY 22?

#### Plan Experience

For the year ending on the Measurement Date of June 30, 2022, the Plan saw an experience gain of \$25,674,031 or 15.39% of the beginning Total OPEB Liability ("TOL"). This was mainly due to higher turnover than expected as well as premiums for the average Medicare Supplement for Teachers and non-Teachers remaining largely flat vs the expected 9% increase over the 2-year period.

#### Assumption Changes

One or more key assumptions have changed since the prior valuation. The total impact of these assumption changes increased disclosed liabilities by approximately \$6.4 million, as detailed below.

- ✓ Due to the GASB 75 standards the discount rate has been changed from 4.75% to 5.74% decreasing the disclosed liability by approximately \$21 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 approximately \$16 million.
- ✓ Based on recent actuarial research we have adopted the Getzen model for future projected healthcare costs increasing the disclosed liability by approximately \$12 million.

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 investments earned approximately \$2.0 million less than expected.

#### Changes in Benefit 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.

## EXECUTIVE SUMMARY

### Recognition Period

- ✓ Changes in assumptions & plan experience are amortized into the net OPEB expense over 5.93 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.

### Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare supplement) plans – represent 73.45% 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, which includes an assumed 9.00% increase in fiscal year 2022 and an ultimate trend rate of 3.63% in fiscal year 2060.
- ✓ Discount Rate (5.74%) – 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

## EXECUTIVE SUMMARY

### Discount Rate Determinants

- ✓ Employer Current and Future Benefit Payments
- ✓ Municipal Bond Rate – The S&P 20-year high grade municipal bond index was 4.09% as of June 30, 2022.
- ✓ Current Asset Level – The Town had \$5,240,906 of OPEB assets as of June 30, 2022.
- ✓ Future Funding Policy – The Town contributed \$1,558,228 in Fiscal 2022. This amount will increase according to the Town's funding policy statement until their pension system is fully funded at which point the Town will reallocate the funds used to pay its pension amortization towards OPEB.
- ✓ Investment Policy – The Town is expected to earn 6.19% per year on assets based on its investment policy.

### Low Default Risk Obligation Measure (LDRM)

For purposes of this LDRM, we have used a discount rate of 4.09% which represents the 20-year municipal bond index while keeping all other assumptions unchanged from the GASB 74/75 disclosures. Based on this, the LDRM Total OPEB Liability is \$190 million vs. the \$150 million under the GASB 74/75 measure - the reflection of the Town's funding and OPEB Trust Investment policy reduced disclosed liabilities by approximately \$40 million. Please note that the ultimate cost of the plan is the actual benefits paid plus expenses and any changes in assumptions, including discount rate, do not impact the actual cost of the plan.

### Medicare Buy-In

The Town currently has 27 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 Town 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.

## 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.

<b>Representative Plan Statistics</b>		
<b>Valuation Date</b>	<b>July 1, 2021</b>	<b>July 1, 2019</b>
<b>Measurement Date &amp; Period Ending</b>	<b>June 30, 2022</b>	<b>June 30, 2021</b>
<b>Reporting Date/Fiscal Year End</b>	<b>June 30, 2022</b>	<b>June 30, 2021</b>
Total OPEB Liability	153,808,252	166,842,521
Per Eligible Active Plan Participant	82,717	89,471
Per Retiree/Spouse Plan Participant	102,166	116,677
Total Annual Service Cost (Annual Benefit Accrual)	4,391,128	3,472,561
Per Eligible Active Plan Participant	4,990	3,783
Expected Employer Share of Retiree Costs	6,103,903	5,671,413
Per Retiree/Spouse Plan Participant	7,697	7,812
Net OPEB Liability as a % of Covered Payroll	252.75%	259.30%

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.

For the Period Ending on the Measurement Date of:	Number of Retirees, Spouses, & Surviving Spouses	Total OPEB Liability	Present Value at 3.00% of Total OPEB Liability	Employer Share of Premiums/Claims Including "Implicit Cost"	Present Value at 3.00% of Employer Share of Premiums / Claims Including "Implicit Cost"
June 30, 2022	793	153,808,252	153,808,252	6,103,903	6,103,903
June 30, 2027	895	181,404,593	156,481,195	7,817,798	6,743,701
June 30, 2032	932	209,235,304	155,690,716	9,844,860	7,325,500
June 30, 2037	928	238,656,063	153,184,245	11,741,658	7,536,523
June 30, 2042	889	272,024,828	150,613,552	13,171,394	7,292,682
June 30, 2047	851	311,026,333	148,547,909	15,477,375	7,392,080
June 30, 2052	821	358,464,464	147,682,613	17,183,902	7,079,540

## 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 Town for such benefits for the most recent years is as follows:

<u>Fiscal Year Ending</u>	<u>Cost</u>
June 30, 2023 (Projected)	6,034,108
June 30, 2022	6,103,903
June 30, 2021	5,671,413
June 30, 2020	5,214,055
June 30, 2019	4,192,259
June 30, 2018	3,868,209

The Town performs actuarial valuations of its non-pension post-employment benefits liability in accordance with GASB reporting requirements. As of the June 30, 2022 Measurement Date the Net OPEB Liability ("NOL") was determined to be \$148,567,346 assuming a discount rate of 5.74%. The Town has established an OPEB Trust and plans to fund this liability. The Town contributed \$1,558,228 in Fiscal 2022. This amount will increase according to the Town's funding policy statement until their pension system is fully funded at which point the Town will reallocate the funds used to pay its pension amortization towards OPEB. The balance of this fund as of June 30, 2022 was \$5,240,906. See the Town's audit reports for additional information.

PRINCIPAL RESULTS OF THE VALUATION

**Town of North Attleborough**  
**Assuming Funding - 5.74% discount rate**  
**Comparison of Plan Liabilities to Prior Valuation**

Valuation Date	July 1, 2021	July 1, 2019
For the Measurement Period ending on the Measurement Date of:	June 30, 2022	June 30, 2021
For the Reporting Period & Fiscal Year ending on:	June 30, 2022	June 30, 2021
I. Total OPEB Liability		
A. Actives	72,790,552	82,134,790
B. Retirees/Disabled	<u>81,017,700</u>	<u>84,707,731</u>
C. Total	153,808,252	166,842,521
II. Fiduciary Net Position [Plan Assets]	5,240,906	5,256,775
III. Net OPEB Liability (Asset) [I. - II.]	148,567,346	161,585,746
IV. Funded Ratio [II. / I.]	3.41%	3.15%
V. Number of Eligible Participants		
A. Actives	880	918
B. Retirees/Disabled & Dependents	<u>793</u>	<u>726</u>
C. Total	1,673	1,644
VI. Service Cost	4,391,128	3,472,561
VII. Financial Statement Expense/(Income)	17,183,776	19,294,226
VIII. Employer OPEB Trust (Contribution)/Withdrawal	(1,558,228)	(763,370)
IX. Deferred Inflow of Resources	(21,615,360)	(854,624)
X. Deferred Outflow of Resources	24,869,907	26,649,216
XI. Money Weighted Rate of Return	(23.50%)	26.86%
XII. 20-year Municipal Bond Rate (SAPIHG)	4.09%	2.18%
XIII. Expected Long Term Rate of Return (Net of Expense)	6.19%	6.65%
XIV. Crossover Year	Immediate	Immediate
XV. Discount Rate	5.74%	4.75%

PRINCIPAL RESULTS OF THE VALUATION

**Town of North Attleborough  
Plan Liabilities as of the June 30, 2022 Measurement Date**

	General Government Employees and Retirees	Teacher Employees and Retirees	School Non- Teacher Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Solid Waste Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Total OPEB Liability									
A. Actives	5,905,248	34,638,950	16,308,457	6,240,736	6,997,137	263,840	745,058	1,691,126	72,790,552
B. Retirees/Disabled	<u>9,981,295</u>	<u>44,489,561</u>	<u>14,756,653</u>	<u>4,722,997</u>	<u>5,906,526</u>	<u>317,805</u>	<u>67,105</u>	<u>775,758</u>	<u>81,017,700</u>
C. Total	15,886,543	79,128,511	31,065,110	10,963,733	12,903,663	581,645	812,163	2,466,884	153,808,252
II. Fiduciary Net Position [Plan Assets]	241,052	1,200,645	471,362	166,357	195,792	405,000	1,420,806	1,139,892	5,240,906
III. Net OPEB Liability (Asset) [I. - II.]	15,645,491	77,927,866	30,593,748	10,797,376	12,707,871	176,645	(608,643)	1,326,992	148,567,346
<b>For the Reporting Date and Fiscal Year Ending June 30, 2022</b>									
IV. Service Cost	394,868	1,836,937	1,185,297	430,369	380,808	33,235	67,642	61,972	4,391,128
V. Financial Statement Expense/(Income)	1,727,134	8,504,284	3,828,158	1,367,742	1,476,922	53,608	34,487	191,441	17,183,776
VI. Employer Share of Costs	(983,657)	(3,453,736)	(1,042,143)	(201,725)	(332,690)	(37,445)	(37,713)	(14,794)	(6,103,903)
VII. Employer OPEB Trust (Contribution)/Withdrawal	(103,299)	(514,515)	(201,994)	(71,289)	(83,903)	(94,808)	(337,800)	(150,620)	(1,558,228)
VIII. Total Employer Contribution [VI. + VII.]	(1,086,956)	(3,968,251)	(1,244,137)	(273,014)	(416,593)	(132,253)	(375,513)	(165,414)	(7,662,131)

**PRINCIPAL RESULTS OF THE VALUATION**

**CURRENT FUNDING POLICY (OPEN GROUP)**

**Funding - 5.74% discount rate**

For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with an expected 6.19% return		III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Benefit Payments (With Implicit Cost)	VII. Trust Contributions Beyond Pay-as-you-go	VIII. Gross Trust Contributions [VI. + VII.]	IX. Benefit Payments Reimbursed from the Trust	X. Administrative & Investment Expenses Reimbursed from the Trust	XI. Total Employer Payments Less Reimbursements [VIII. - IX. - X.]
			Measurement Date	6.19% return									
2022	June 30, 2022	153,808,252	5,240,906	148,567,346	3.41%	4,391,128	6,103,903	1,558,228	7,662,131	6,103,903	0	1,558,228	
2023	June 30, 2023	159,798,146	6,026,729	153,771,417	3.77%	3,183,441	6,034,108	447,761	6,481,869	6,034,108	0	447,761	
2024	June 30, 2024	165,191,961	6,937,496	158,254,465	4.20%	3,303,292	6,532,276	521,805	7,054,081	6,532,276	0	521,805	
2025	June 30, 2025	170,596,299	7,981,242	162,615,057	4.68%	3,413,715	6,959,668	596,141	7,555,809	6,959,668	0	596,141	
2026	June 30, 2026	175,952,070	9,166,505	166,785,565	5.21%	3,528,570	7,466,429	670,775	8,137,204	7,466,429	0	670,775	
2027	June 30, 2027	181,404,593	10,502,361	170,902,232	5.79%	3,660,561	7,817,798	745,716	8,563,514	7,817,798	0	745,716	
2028	June 30, 2028	186,880,577	11,940,193	174,940,384	6.39%	3,778,670	8,248,152	764,432	9,012,584	8,248,152	0	764,432	
2029	June 30, 2029	192,421,437	16,634,766	175,786,671	8.64%	3,915,297	8,629,630	3,838,458	12,468,088	8,629,630	0	3,838,458	
2030	June 30, 2030	198,006,180	21,696,513	176,309,667	10.96%	4,049,630	9,079,112	3,912,773	12,991,885	9,079,112	0	3,912,773	
2031	June 30, 2031	203,532,755	27,148,470	176,384,285	13.34%	4,183,966	9,628,550	3,987,386	13,615,936	9,628,550	0	3,987,386	
2032	June 30, 2032	209,235,304	33,015,106	176,220,198	15.78%	4,313,881	9,844,860	4,062,305	13,907,165	9,844,860	0	4,062,305	
2033	June 30, 2033	215,044,520	39,322,415	175,722,105	18.29%	4,459,927	10,255,080	4,137,540	14,392,620	10,255,080	0	4,137,540	
2034	June 30, 2034	220,849,310	46,098,007	174,751,303	20.87%	4,606,989	10,737,773	4,213,097	14,950,870	10,737,773	0	4,213,097	
2035	June 30, 2035	226,844,170	53,371,212	173,472,958	23.53%	4,759,846	10,917,730	4,288,987	15,206,717	10,917,730	0	4,288,987	
2036	June 30, 2036	232,809,134	61,173,182	171,635,952	26.28%	4,919,035	11,286,629	4,365,217	15,651,846	11,286,629	0	4,365,217	
2037	June 30, 2037	238,656,063	69,272,010	169,384,053	29.03%	5,072,124	11,741,658	4,184,638	15,926,296	11,741,658	0	4,184,638	
2038	June 30, 2038	245,052,482	77,944,155	167,108,327	31.81%	5,246,174	12,030,831	4,254,508	16,285,339	12,030,831	0	4,254,508	
2039	June 30, 2039	251,395,070	87,225,288	164,169,782	34.70%	5,422,597	12,257,586	4,324,554	16,582,140	12,257,586	0	4,324,554	
2040	June 30, 2040	258,211,477	96,893,407	161,318,070	37.52%	5,596,244	12,677,048	4,142,586	16,819,634	12,677,048	0	4,142,586	
2041	June 30, 2041	265,062,512	107,225,395	157,837,117	40.45%	5,791,305	12,993,773	4,206,063	17,199,836	12,993,773	0	4,206,063	
2042	June 30, 2042	272,024,828	118,262,345	153,762,483	43.47%	5,976,721	13,171,394	4,269,540	17,440,934	13,171,394	0	4,269,540	
2043	June 30, 2043	278,842,254	130,047,895	148,794,359	46.64%	6,168,447	13,642,311	4,333,017	17,975,328	13,642,311	0	4,333,017	
2044	June 30, 2044	286,409,445	142,607,621	143,801,824	49.79%	6,367,482	14,020,441	4,376,347	18,396,788	14,020,441	0	4,376,347	
2045	June 30, 2045	294,214,549	155,989,892	138,224,657	53.02%	6,594,768	14,353,839	4,420,111	18,773,950	14,353,839	0	4,420,111	
2046	June 30, 2046	302,489,071	170,246,074	132,242,997	56.28%	6,822,772	14,856,614	4,464,312	19,320,926	14,856,614	0	4,464,312	
2047	June 30, 2047	311,026,333	185,430,718	125,595,615	59.62%	7,058,813	15,477,375	4,508,955	19,986,330	15,477,375	0	4,508,955	
2048	June 30, 2048	319,244,260	201,601,755	117,642,505	63.15%	7,310,132	15,849,971	4,554,044	20,404,015	15,849,971	0	4,554,044	
2049	June 30, 2049	328,293,469	218,820,708	109,472,761	66.65%	7,565,919	16,111,518	4,599,585	20,711,103	16,111,518	0	4,599,585	
2050	June 30, 2050	337,859,271	237,152,913	100,706,358	70.19%	7,831,702	16,625,046	4,645,581	21,270,627	16,625,046	0	4,645,581	
2051	June 30, 2051	347,984,725	256,667,754	91,316,971	73.76%	8,120,462	16,907,071	4,692,037	21,599,108	16,907,071	0	4,692,037	
2052	June 30, 2052	358,464,464	277,438,914	81,025,550	77.40%	8,413,456	17,183,902	4,738,957	21,922,859	17,183,902	0	4,738,957	

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2022 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

<b>Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2022</b>	
<b>Description</b>	<b>Amount</b>
I. Service Cost	4,391,128
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	7,990,312
III. Deferred (Inflows)/Outflows from Plan Experience*	(4,465,189)
IV. Deferred (Inflows)/Outflows from Changes of Assumptions*	9,374,833
V. Projected Earnings on OPEB Plan Investments	(400,789)
VI. Deferred (Inflows)/Outflows from Earnings on Plan Investments**	293,481
VII. OPEB Plan Administrative Expense	0
VIII. Other Changes in Fiduciary Net Position	0
IX. Financial Statement Expense/(Income) Prior to Plan Design Changes [I. + II.+ ... + VII. + VIII.]	17,183,776
X. Expense Related to Change in Benefit Terms***	0
XI. Financial Statement Expense/(Income) [IX. + X.]	17,183,776

\* Amortized over 5.93 years

\*\* Amortized over 5.00 years

\*\*\* Recognized Immediately

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES  
(As of the June 30, 2022 Measurement Date)

2. Changes in Net OPEB Liability

Changes in Net OPEB Liability			
	Increase (Decrease)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
<b>I. Balances for the June 30, 2021 Reporting Date</b>	166,842,521	5,256,775	161,585,746
<b>II. Prior Period Adjustment</b>	0	0	0
<b>III. Balances for the June 30, 2021 Reporting Date with Adjustment [I. + II.]</b>	166,842,521	5,256,775	161,585,746
<b>Changes for the year:</b>			
IV. Service Cost	4,391,128	0	4,391,128
V. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	7,990,312	0	7,990,312
VI. Changes in Benefit Terms *	0	0	0
VII. Change in Assumptions **	6,362,225	0	6,362,225
VIII. Differences Between Actual and Expected Experience **	(25,674,031)	0	(25,674,031)
IX. Net Investment Income	0	(1,574,097)	1,574,097
X. Employer Contributions to Trust	0	7,662,131	(7,662,131)
XI. Benefit Payments Withdrawn from Trust	0	(6,103,903)	6,103,903
XII. Benefit Payments Excluding Implicit Cost	(4,672,732)	0	(4,672,732)
XIII. Implicit Cost Amount	(1,431,171)	0	(1,431,171)
XIV. Total Benefit Payments Including Implicit Cost [XII. + XIII.]	(6,103,903)	0	(6,103,903)
XV. Administrative Expense	0	0	0
XVI. Other Charges	0	0	0
<b>XVII. Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]</b>	<b>(13,034,269)</b>	<b>(15,869)</b>	<b>(13,018,400)</b>
<b>XVIII. Balances for the June 30, 2022 Reporting Date [III.+XVII.]</b>	<b>153,808,252</b>	<b>5,240,906</b>	<b>148,567,346</b>

\* Recognized Immediately

\*\* Amortized over 5.93 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES  
(As of the June 30, 2022 Measurement Date)

3. Changes in Net OPEB Expense

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of the Effects of Differences Between Expected & Actual Experience									
Fiscal Year	Differences			2022	2023	2024	2025	2026	2027
	Between Actual & Expected Experience	Recognition Period (Years)	Remaining Balance						
2017									
2018	(223,646)	5.20	(8,601)	(43,009)	(8,601)				
2019	0	5.20	0	0	0	0			
2020	(540,236)	5.83	(262,244)	(92,664)	(92,664)	(92,664)	(76,916)		
2021	0	5.83	0	0	0	0	0	0	
2022	(25,674,031)	5.93	(21,344,515)	(4,329,516)	(4,329,516)	(4,329,516)	(4,329,516)	(4,329,516)	(4,026,451)
2023									
2024									
2025									
2026									
Total Remaining Balance			(21,615,360)						
Net increase (decrease) in OPEB Expense				(4,465,189)	(4,430,781)	(4,422,180)	(4,406,432)	(4,329,516)	(4,026,451)

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of the Effects of Changes in Assumptions									
Fiscal Year	Differences from Changes in			2022	2023	2024	2025	2026	2027
	Actuarial Assumptions	Recognition Period (years)	Remaining Balance						
2017									
2018	5,539,349	5.20	213,054	1,065,259	213,054				
2019	16,198,648	5.20	3,738,152	3,115,124	3,115,124	623,028			
2020	8,100,976	5.83	3,932,380	1,389,532	1,389,532	1,389,532	1,153,316		
2021	15,927,746	5.83	10,463,684	2,732,031	2,732,031	2,732,031	2,732,031	2,267,591	
2022	6,362,225	5.93	5,289,338	1,072,887	1,072,887	1,072,887	1,072,887	1,072,887	997,790
2023									
2024									
2025									
2026									
Total Remaining Balance			23,636,608						
Net increase (decrease) in OPEB Expense				9,374,833	8,522,628	5,817,478	4,958,234	3,340,478	997,790

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES  
(As of the June 30, 2022 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of Differences Between Projected & Actual Earnings on OPEB Plan Investments									
Fiscal Year	Differences			2022	2023	2024	2025	2026	2027
	Between Actual & Expected Earnings	Recognition Period (years)	Remaining Balance						
2017									
2018	(2,155)	5.00	0	(431)					
2019	31,562	5.00	6,314	6,312	6,314				
2020	153,959	5.00	61,583	30,792	30,792	30,791			
2021	(690,845)	5.00	(414,507)	(138,169)	(138,169)	(138,169)	(138,169)		
2022	1,974,886	5.00	1,579,909	394,977	394,977	394,977	394,977	394,978	
2023									
2024									
2025									
2026									
Total Remaining Balance			1,233,299						
Net increase (decrease) in OPEB Expense				293,481	293,914	287,599	256,808	394,978	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2022 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Statement of (Inflows) & Outflows Arising from Current & Prior Reporting Periods for the Measurement Period Ending on June 30, 2022 to be Reported for the Fiscal Year Ending June 30, 2022			
	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	(21,615,360)	(21,615,360)
III. Changes of Assumptions	23,636,608	0	23,636,608
IV. Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	1,233,299	0	1,233,299
VI. Total [I. + II. + III. + IV.]	24,869,907	(21,615,360)	3,254,547

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES  
 (As of the June 30, 2022 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

<b>Annual Amortization of Deferred (Inflows) &amp; Outflows</b>		
The balance of deferred (inflows) & outflows as of the Reporting Date of June 30, 2022 will be recognized in future years as shown below.		
	<b>Year ending June 30:</b>	
	2023	4,385,761
	2024	1,682,897
	2025	808,610
	2026	(594,060)
	2027	(3,028,661)
	Thereafter	0

4. Discount Rate

The discount rate used to measure the Total OPEB liability was 5.74% as of June 30, 2022 and 4.75% as of June 30, 2021. The projection of cash flows used to determine the discount rate assumed that contributions will be made in accordance with the Town'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 4.09% as of June 30, 2022. 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.

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES  
(As of the June 30, 2022 Measurement Date)

5. Funding Policy

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. For the period ending on the June 30, 2022 Measurement Date, total Town premiums plus implicit costs for the retiree medical program were \$6,103,903. The Town also contributed \$1,558,228 to an OPEB Trust for a total contribution during the measurement period of \$7,662,131 to be reported on the financial statement for the fiscal year ending June 30, 2022.

6. Investment Policy

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

Investment Target Allocation & Expected Long-Term Real Rate of Return			
Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return*
Domestic Equity - Large Cap	21.75%	Domestic Equity - Large Cap	4.42%
Domestic Equity - Small/Mid Cap	14.75%	Domestic Equity - Small/Mid Cap	4.81%
International Equity - Developed Market	11.75%	International Equity - Developed Market	4.91%
International Equity - Emerging Market	6.25%	International Equity - Emerging Market	5.58%
Domestic Fixed Income	22.50%	Domestic Fixed Income	1.00%
International Fixed Income	4.75%	International Fixed Income	1.04%
Alternatives	13.25%	Alternatives	5.98%
Real Estate	4.50%	Real Estate	6.25%
Cash	0.50%	Cash	0.00%
Total	<u>100.00%</u>		
		I. Real Rate of Return	3.94%
		II. Inflation Assumption	2.50%
		III. Total Nominal Return [I. + II.]	6.44%
		IV. Investment Expense	0.25%
		V. Net Investment Return* [III.-IV.]	<u>6.19%</u>

\* Mean Geometric Returns based on 2021 Horizon Survey of Capital Market Assumptions

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2022 Measurement Date)

7. Schedule of The Town'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, 2022	11,453,921	(7,662,131)	3,791,790	58,779,842	13.04%
June 30, 2021	10,276,616	(6,434,783)	3,841,833	62,315,670	10.33%
June 30, 2020	12,529,562	(5,968,304)	6,561,258	60,500,650	9.86%
June 30, 2019	11,623,416	(4,790,933)	6,832,483	60,500,650	7.92%
June 30, 2018	10,051,332	(4,394,179)	5,657,153	58,738,497	7.48%
June 30, 2017	9,832,225	(4,381,467)	5,450,758	53,773,100	8.15%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2022 Measurement Date)

8. Effect of 1% Change in Healthcare Trend

<u>Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2022 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Trend Rate</u>	<u>1% Increase</u>
Net OPEB Liability (Asset)	128,115,792	148,567,346	174,317,672

9. Effect of 1% Change in Discount Rates

<u>Impact of a 1% Change in the Discount Rate as of the June 30, 2022 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Net OPEB Liability (Asset)	171,682,160	5.74%	129,988,699

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES  
(As of the June 30, 2022 Measurement Date)

10. Money Weighted Rate of Return

	Plan	Periods	Period
	Investments /	Invested	Weight
	Net External		
	Cash Flows		
I. Beginning value - June 30, 2021	5,256,775	12	1.0000
Monthly net external cash flows:			
July	1,558,228	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>	<u>0</u>	0	0.0000
II. Total net external cash flow	1,558,228		
III. Earnings and increase in fair value	(1,574,097)		
IV. Ending value - June 30, 2022 [I.+II.+III.]	5,240,906		
V. Receivable Contributions	0		
Plan Asset Value - June 30, 2022 [IV.+V.]	5,240,906		
Money Weighted Rate of Return	(23.50%)		

**EXHIBIT A**  
**FINANCIAL STATEMENT DISCLOSURES**  
(As of the June 30, 2022 Measurement Date)

**11. OPEB Liability, OPEB Expense**

	Fiscal Year Ending June 30, 2022								Total
	General Government Employees and Retirees	Teacher Employees and Retirees	School Non- Teacher Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Solid Waste Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	
I. Total OPEB Liability as of June 30, 2022	15,886,543	79,128,511	31,065,110	10,963,733	12,903,663	581,645	812,163	2,466,884	153,808,252
II. Fiduciary Net Position as of June 30, 2022	241,052	1,200,645	471,362	166,357	195,792	405,000	1,420,806	1,139,892	5,240,906
III. Net OPEB Liability (Asset) as of June 30, 2022 [I. - II.]	15,645,491	77,927,866	30,593,748	10,797,376	12,707,871	176,645	(608,643)	1,326,992	148,567,346
IV. Service Cost	394,868	1,836,937	1,185,297	430,369	380,808	33,235	67,642	61,972	4,391,128
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	814,166	4,086,908	1,629,872	579,879	675,346	30,479	43,725	129,937	7,990,312
VI. Projected Earnings on OPEB Plan Investments	(19,322)	(96,371)	(37,902)	(13,394)	(15,745)	(29,782)	(104,354)	(83,919)	(400,789)
VII. Net Recognition of Deferred (Inflows)/Outflows	537,422	2,676,810	1,050,891	370,888	436,513	19,676	27,474	83,451	5,203,125
VIII. OPEB Plan Administrative Expense	0	0	0	0	0	0	0	0	0
IX. Expense Related to Change in Benefit Terms	0	0	0	0	0	0	0	0	0
X. Financial Statement Expense/(Income) [IV. + V. + ... + VIII. + IX.]	1,727,134	8,504,284	3,828,158	1,367,742	1,476,922	53,608	34,487	191,441	17,183,776
XI. Employer Share of Costs	(983,657)	(3,453,736)	(1,042,143)	(201,725)	(332,690)	(37,445)	(37,713)	(14,794)	(6,103,903)
XII. Employer (Payments) Withdrawals to/from OPEB Trust	(103,299)	(514,515)	(201,994)	(71,289)	(83,903)	(94,808)	(337,800)	(150,620)	(1,558,228)
XIII. Total Employer Contribution [XI. + XII.]	(1,086,956)	(3,968,251)	(1,244,137)	(273,014)	(416,593)	(132,253)	(375,513)	(165,414)	(7,662,131)
XIV. Net OPEB Expense/(Income) [X. + XIII.]	640,178	4,536,033	2,584,021	1,094,728	1,060,329	(78,645)	(341,026)	26,027	9,521,645

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2022 Measurement Date)

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

Valuation Date	July 1, 2021
For the Measurement Period ending on the Measurement Date of:	June 30, 2022
For the Reporting Period & Fiscal Year ending on:	June 30, 2022

Source of Deferred Inflow/Outflow	
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	(21,615,360)
II. Deferred (Inflow)/Outflow from Investment Experience	1,233,299
III. Deferred (Inflow)/Outflow from Changes in Assumptions	23,636,608

Change in Deferred Inflow/Outflow	
I. Deferred Outflow at the beginning of the period	26,754,217
II. Deferred Outflow created during the period	8,337,111
III. Deferred Outflow recognized during the period	9,806,914
IV. Change in Deferred Outflow (II. - III.)	(1,469,803)
V. Deferred Outflow at end of the period (I. + IV.)	25,284,414
VI. Deferred Inflow at the beginning of the period	(959,625)
VII. Deferred Inflow created during the period	(25,674,031)
VIII. Deferred Inflow recognized during the period	(4,603,789)
IX. Change in Deferred Inflow (VII. - VIII.)	(21,070,242)
X. Deferred inflow at end of the period (VI. + IX.)	(22,029,867)

Net OPEB Liability	
I. Net OPEB Liability at beginning of period	161,585,746
II. Service Cost	4,391,128
III. Interest on Total OPEB Liability, Service Cost, and Payments	7,990,312
IV. Projected Investment Income	(400,789)
V. OPEB Plan Administrative Expense	0
VI. Total Employer Contributions	(7,662,131)
VII. Expense Related to Change in Benefit Terms	0
VIII. Net OPEB Expense/(Income) - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + ... + VI. + VII.)	4,318,520
IX. Deferred Outflow created during the period	8,337,111
X. Deferred Inflow created during the period	(25,674,031)
XI. Net OPEB Liability at end of period (I. + VIII. + IX. + X.)	148,567,346

Net OPEB Expense	
I. Service Cost	4,391,128
II. Interest on Total OPEB Liability, Service Cost, and Payments	7,990,312
III. Projected Investment Income	(400,789)
IV. Recognition of Deferred (Inflow)/Outflow	5,203,125
V. OPEB Plan Administrative Expense	0
VI. Expense Related to Change in Benefit Terms	0
VII. Financial Statement Expense/(Income) (I. + II. + III. + IV. + V. + VI.)	17,183,776
VIII. Benefit Payments	(6,103,903)
IX. Contributions to Trust	(1,558,228)
X. Total Employer Payments (VIII. + IX.)	(7,662,131)
XI. Total Net OPEB Expense/(Income) under GASB 75 (IX. + X.)	9,521,645

**EXHIBIT A**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**(As of the June 30, 2022 Measurement Date)**

<b>Schedule of Changes in the Town's Net OPEB Liability and Related Ratios</b>						
Valuation Date	July 1, 2021	July 1, 2019	July 1, 2019	July 1, 2017	July 1, 2017	July 1, 2017
Measurement Date	June 30, 2022	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, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
<b>Total OPEB Liability</b>	153,808,252	166,842,521	145,096,220	132,776,940	110,485,189	102,734,329
I. Service Cost	4,391,128	3,472,561	3,297,628	3,566,214	2,614,496	2,886,392
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	7,990,312	8,017,407	6,674,967	6,719,148	6,206,574	6,392,540
III. Changes in Benefit Terms	0	0	0	0	(2,517,704)	0
IV. Difference Between Expected & Actual Plan Experience	(25,674,031)	0	(540,236)	0	5,539,349	0
V. Changes of Assumptions	6,362,225	15,927,746	8,100,976	16,198,648	(223,646)	0
VI. Benefit Payments Excluding Implicit Cost	(4,672,732)	(4,363,041)	(4,032,184)	(4,025,843)	(3,729,487)	N/A
VII. Implicit Cost Amount	(1,431,171)	(1,308,372)	(1,181,871)	(166,416)	(138,722)	N/A
VIII. Total Benefit Payments	(6,103,903)	(5,671,413)	(5,214,055)	(4,192,259)	(3,868,209)	(3,947,826)
IX. Other	0	0	0	0	0	0
X. Net Change in OPEB Liability [I.+II.+III.+IV.+V.+VIII.+IX.]	(13,034,269)	21,746,301	12,319,280	22,291,751	7,750,860	5,331,106
XI. Total OPEB Liability - Beginning of Period	166,842,521	145,096,220	132,776,940	110,485,189	102,734,329	97,403,223
XII. Prior Period Adjustment	0	0	0	0	0	0
XIII. Total OPEB Liability - Beginning of Period with Adjustment [XI.+XII.]	166,842,521	145,096,220	132,776,940	110,485,189	102,734,329	97,403,223
XIV. Total OPEB Liability - End of Period [XIII.+XIV.]	153,808,252	166,842,521	145,096,220	132,776,940	110,485,189	102,734,329
<b>Plan Fiduciary Net Position</b>	5,240,906	5,256,775	3,542,041	2,725,046	1,976,392	1,335,864
XV. Earnings from Plan Investments	(1,574,097)	951,364	62,746	149,980	114,558	98,101
XVI. Employer Contribution to Trust	7,662,131	6,434,783	5,968,304	4,790,933	4,394,179	4,381,467
XVII. Benefit Payments from Trust, Including Refunds of Member Contributions	(6,103,903)	(5,671,413)	(5,214,055)	(4,192,259)	(3,868,209)	(3,947,826)
XVIII. Administrative Expense	0	0	0	0	0	0
XIX. Other	0	0	0	0	0	0
XX. Net Change in Plan Fiduciary Net Position [XV.+XVI.+XVII.+XVIII.+XIX.]	(15,869)	1,714,734	816,995	748,654	640,528	531,742
XXI. Plan Fiduciary Net Position - Beginning of Period	5,256,775	3,542,041	2,725,046	1,976,392	1,335,864	804,122
XXII. Prior Period Adjustment	0	0	0	0	0	0
XXIII. Plan Fiduciary Net Position - Beginning of Period with Adjustment [XXI.+XXII.]	5,256,775	3,542,041	2,725,046	1,976,392	1,335,864	804,122
XXIV. Plan Fiduciary Net Position - End of Period [XXIII.+XXIV.]	5,240,906	5,256,775	3,542,041	2,725,046	1,976,392	1,335,864
XXV. Net OPEB Liability [XIV.-XXIV.]	148,567,346	161,585,746	141,554,179	130,051,894	108,508,797	101,398,465
XXVI. Plan Fiduciary Net Position as % of Total OPEB Liability [XXIV./XIV.]	3.41%	3.15%	2.44%	2.05%	1.79%	1.30%
XXVII. Covered Employee Payroll	58,779,842	62,315,670	60,500,650	60,500,650	58,738,497	53,773,100
XXVIII. Plan NOL as % of Covered Employee Payroll [XXV./XXVII.]	252.75%	259.30%	233.97%	214.96%	184.73%	188.57%
Single Discount Rate to Calculate Plan Liabilities	5.74%	4.75%	5.50%	5.00%	6.00%	6.50%

## EXHIBIT B

### REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2022 Measurement Date)

The Town'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 2022 and future years we have used a 30-year amortization increasing by 3.00% per year of the Town's unfunded liability for the purpose of calculating ADC. The following table shows the components of the Town's annual ADC and the amount actually contributed to the plan:

<u>Actuarially Determined Contribution - Deficiency / (Excess)</u>						
For the Fiscal Year Ending:	<u>June 30, 2022</u>	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
I. Service Cost	4,391,128	3,472,561	3,297,628	3,566,214	2,614,496	2,886,392
II. 30 Year Level Dollar Amortization of NOL	<u>7,062,793</u>	<u>6,804,055</u>	<u>9,231,934</u>	<u>8,057,202</u>	<u>7,436,836</u>	<u>6,945,833</u>
III. Actuarial Determined Contribution [I. + II.]	11,453,921	10,276,616	12,529,562	11,623,416	10,051,332	9,832,225
IV. Contributions in Relation to the Actuarially Determined Contribution	<u>(7,662,131)</u>	<u>(6,434,783)</u>	<u>(5,968,304)</u>	<u>(4,790,933)</u>	<u>(4,394,179)</u>	<u>(4,381,467)</u>
V. Contribution Deficiency / (Excess) [III. + IV.]	<u>3,791,790</u>	<u>3,841,833</u>	<u>6,561,258</u>	<u>6,832,483</u>	<u>5,657,153</u>	<u>5,450,758</u>
Covered Employee Payroll	58,779,842	62,315,670	60,500,650	60,500,650	58,738,497	53,773,100
Contributions as a % of Covered Employee Payroll	13.04%	10.33%	9.86%	7.92%	7.48%	8.15%
Discount Rate	5.74%	4.75%	5.50%	5.00%	6.00%	6.50%
Money Weighted Rate of Return	<u>(23.50%)</u>	26.86%	1.91%	5.94%	7.19%	8.45%

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2022 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of July 1, 2021.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, June 30, 2022.

Actuarial Assumptions:

Investment Rate of Return:	6.19%, net of OPEB plan investment expense, including inflation.
Municipal Bond Rate	4.09% as of June 30, 2022 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
Single Equivalent Discount Rate:	5.74%, net of OPEB plan investment expense, including inflation
Inflation:	2.50% as of June 30, 2022 and for future periods
Salary Increases:	3.00% annually as of June 30, 2022 and for future periods
Cost of Living Adjustment:	Not Applicable

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2022 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

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2022 Measurement Date)

Plan Membership

At July 1, 2021, OPEB plan membership consisted of the following:

Retirees & Beneficiaries:	793
Actives:	<u>880</u>
Total:	1,673

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, 2021 to June 30, 2022

- ✓ Due to the GASB 75 standards the discount rate has been changed from 4.75% to 5.74%.
- ✓ 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 projected healthcare costs.

Contributions/Withdrawals:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town contributed \$1,558,228 beyond the pay-as-you-go cost for the period ending on the June 30, 2022 Measurement Date. For the year ending on the June 30, 2022 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$6,103,903. \$1,431,171 of the \$6,103,903 represents implicit cost.

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2022 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.

**APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS**

**CONTRIBUTION PROJECTION DISCLOSURES**

**Table 1: Projection of Contributions using a July 1, 2021 Valuation Date**

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total Payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2022	58,779,842	0	58,779,842	0	6,103,903	0	6,103,903
June 30, 2023	54,959,647	5,583,590	60,543,237	0	6,034,108	0	6,034,108
June 30, 2024	51,913,421	10,446,113	62,359,534	0	6,532,276	0	6,532,276
June 30, 2025	49,316,524	14,913,796	64,230,320	0	6,959,668	0	6,959,668
June 30, 2026	46,934,456	19,222,774	66,157,230	0	7,466,429	0	7,466,429
June 30, 2027	44,958,477	23,183,470	68,141,947	0	7,817,798	0	7,817,798
June 30, 2028	42,941,257	27,244,948	70,186,205	0	8,248,152	0	8,248,152
June 30, 2029	41,187,808	31,103,983	72,291,791	0	8,629,630	0	8,629,630
June 30, 2030	39,527,600	34,932,945	74,460,545	0	9,079,112	0	9,079,112
June 30, 2031	37,805,913	38,888,448	76,694,361	0	9,628,550	0	9,628,550
June 30, 2032	35,967,114	43,028,078	78,995,192	0	9,844,860	0	9,844,860
June 30, 2033	34,372,140	46,992,908	81,365,048	0	10,221,404	33,676	10,255,080
June 30, 2034	32,845,525	50,960,474	83,805,999	0	10,653,512	84,261	10,737,773
June 30, 2035	31,334,903	54,985,276	86,320,179	0	10,763,758	153,972	10,917,730
June 30, 2036	29,937,299	58,972,485	88,909,784	0	11,034,799	251,830	11,286,629
June 30, 2037	28,406,569	63,170,509	91,577,078	0	11,366,933	374,725	11,741,658
June 30, 2038	27,087,012	67,237,378	94,324,390	0	11,572,461	458,370	12,030,831
June 30, 2039	25,873,232	71,280,890	97,154,122	0	11,697,389	560,197	12,257,586
June 30, 2040	24,569,574	75,499,172	100,068,746	0	11,997,367	679,681	12,677,048
June 30, 2041	23,468,086	79,602,722	103,070,808	0	12,223,732	770,041	12,993,773
June 30, 2042	22,280,360	83,882,572	106,162,932	0	12,300,555	870,839	13,171,394
June 30, 2043	21,177,645	88,170,175	109,347,820	0	12,605,701	1,036,610	13,642,311
June 30, 2044	20,022,950	92,605,305	112,628,255	0	12,771,591	1,248,850	14,020,441
June 30, 2045	19,094,059	96,913,044	116,007,103	0	12,844,438	1,509,401	14,353,839
June 30, 2046	18,175,195	101,312,121	119,487,316	0	13,016,969	1,839,645	14,856,614
June 30, 2047	17,171,456	105,900,479	123,071,935	0	13,252,485	2,224,890	15,477,375
June 30, 2048	16,214,877	110,549,216	126,764,093	0	13,312,089	2,537,882	15,849,971
June 30, 2049	15,267,891	115,299,125	130,567,016	0	13,217,805	2,893,713	16,111,518
June 30, 2050	14,215,447	120,268,579	134,484,026	0	13,331,795	3,293,251	16,625,046
June 30, 2051	13,300,868	125,217,679	138,518,547	0	13,271,080	3,635,991	16,907,071
June 30, 2052	12,362,445	130,311,658	142,674,103	0	13,177,974	4,005,928	17,183,902
June 30, 2053	11,317,974	135,636,352	146,954,326	0	13,250,598	4,469,051	17,719,649
June 30, 2054	10,195,062	141,167,894	151,362,956	0	13,231,349	4,976,625	18,207,974
June 30, 2055	9,203,798	146,700,047	155,903,845	0	12,908,017	5,535,370	18,443,387
June 30, 2056	8,221,524	152,359,436	160,580,960	0	12,716,943	6,162,274	18,879,217
June 30, 2057	7,234,144	158,164,245	165,398,389	0	12,719,269	6,838,866	19,558,135
June 30, 2058	6,305,179	164,055,162	170,360,341	0	12,499,442	7,490,827	19,990,269
June 30, 2059	5,446,620	170,024,531	175,471,151	0	12,326,495	8,181,665	20,508,160
June 30, 2060	4,453,404	176,281,882	180,735,286	0	12,105,793	8,914,898	21,020,691
June 30, 2061	3,545,096	182,612,249	186,157,345	0	11,894,837	9,645,002	21,539,839

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES (CONTINUED)

**Table 1: Projection of Contributions using a July 1, 2021 Valuation Date**

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total Payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2062	2,865,717	188,876,348	191,742,065	0	11,500,798	10,400,250	21,901,048
June 30, 2063	2,190,129	195,304,198	197,494,327	0	11,074,084	11,250,374	22,324,458
June 30, 2064	1,649,090	201,770,067	203,419,157	0	10,777,681	12,153,706	22,931,387
June 30, 2065	1,157,468	208,364,264	209,521,732	0	10,498,887	13,126,660	23,625,547
June 30, 2066	802,131	215,005,253	215,807,384	0	10,239,888	14,173,724	24,413,612
June 30, 2067	496,246	221,785,360	222,281,606	0	10,067,664	15,286,532	25,354,196
June 30, 2068	253,330	228,696,724	228,950,054	0	9,866,561	16,416,157	26,282,718
June 30, 2069	134,509	235,684,047	235,818,556	0	9,662,944	17,592,534	27,255,478
June 30, 2070	65,987	242,827,126	242,893,113	0	9,470,754	18,826,757	28,297,511
June 30, 2071	27,736	250,152,170	250,179,906	0	9,247,102	20,061,685	29,308,787
June 30, 2072	11,234	257,674,069	257,685,303	0	9,020,147	21,335,357	30,355,504
June 30, 2073	0	265,415,862	265,415,862	0	8,777,636	22,681,558	31,459,194
June 30, 2074	0	273,378,338	273,378,338	0	8,511,328	24,072,579	32,583,907
June 30, 2075	0	281,579,688	281,579,688	0	8,263,311	25,518,766	33,782,077
June 30, 2076	0	290,027,079	290,027,079	0	7,986,068	27,014,414	35,000,482
June 30, 2077	0	298,727,891	298,727,891	0	7,681,955	28,560,942	36,242,897
June 30, 2078	0	307,689,728	307,689,728	0	7,384,638	30,188,656	37,573,294
June 30, 2079	0	316,920,420	316,920,420	0	7,063,015	31,851,957	38,914,972
June 30, 2080	0	326,428,033	326,428,033	0	6,731,431	33,568,254	40,299,685
June 30, 2081	0	336,220,874	336,220,874	0	6,385,413	35,349,110	41,734,523
June 30, 2082	0	346,307,500	346,307,500	0	6,035,197	37,172,932	43,208,129
June 30, 2083	0	356,696,725	356,696,725	0	5,682,060	39,058,171	44,740,231
June 30, 2084	0	367,397,627	367,397,627	0	5,311,673	41,004,176	46,315,849
June 30, 2085	0	378,419,556	378,419,556	0	4,937,543	43,013,915	47,951,458
June 30, 2086	0	389,772,143	389,772,143	0	4,563,832	45,084,091	49,647,923
June 30, 2087	0	401,465,307	401,465,307	0	4,184,594	47,224,492	51,409,086
June 30, 2088	0	413,509,266	413,509,266	0	3,814,032	49,455,513	53,269,545
June 30, 2089	0	425,914,544	425,914,544	0	3,452,490	51,742,612	55,195,102
June 30, 2090	0	438,691,980	438,691,980	0	3,101,691	54,105,640	57,207,331
June 30, 2091	0	451,852,739	451,852,739	0	2,766,607	56,560,086	59,326,693
June 30, 2092	0	465,408,321	465,408,321	0	2,446,896	59,086,012	61,532,908
June 30, 2093	0	479,370,571	479,370,571	0	2,145,383	61,692,500	63,837,883
June 30, 2094	0	493,751,688	493,751,688	0	1,863,475	64,390,764	66,254,239
June 30, 2095	0	508,564,239	508,564,239	0	1,602,430	67,181,703	68,784,133
June 30, 2096	0	523,821,166	523,821,166	0	1,363,091	70,065,718	71,428,809

**APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS**

**FIDUCIARY NET POSITION PROJECTION DISCLOSURES**

**Table 2: Projection of OPEB Plan's Fiduciary Net Position using a July 1 2021 Valuation 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 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 [III. + III.]	V. Administrative Expenses Withdrawn from the Trust for Current Plan Members	VI. Benefit Payments Withdrawn from the Trust	VII. Trust Withdrawals [V. + VI.]	VIII. Investment Earnings	IX. Ending Fiduciary Net Position for Current Plan Members
June 30, 2022	5,256,775	6,103,903	1,558,228	7,662,131	0	6,103,903	6,103,903	(1,574,097)	5,240,906
June 30, 2023	5,240,906	6,034,108	406,466	6,440,574	0	6,034,108	6,034,108	306,884	5,954,256
June 30, 2024	5,954,256	6,532,276	434,395	6,966,671	0	6,532,276	6,532,276	381,811	6,770,462
June 30, 2025	6,770,462	6,959,668	457,722	7,417,390	0	6,959,668	6,959,668	433,045	7,661,229
June 30, 2026	7,661,229	7,466,429	475,873	7,942,302	0	7,466,429	7,466,429	488,737	8,625,839
June 30, 2027	8,625,839	7,817,798	492,006	8,309,804	0	7,817,798	7,817,798	548,938	9,666,783
June 30, 2028	9,666,783	8,248,152	467,694	8,715,846	0	8,248,152	8,248,152	612,632	10,747,109
June 30, 2029	10,747,109	8,629,630	2,186,938	10,816,568	0	8,629,630	8,629,630	731,916	13,665,963
June 30, 2030	13,665,963	9,079,112	2,077,107	11,156,219	0	9,079,112	9,079,112	909,244	16,652,314
June 30, 2031	16,652,314	1,965,552	9,628,550	11,594,102	0	9,628,550	9,628,550	1,090,699	19,708,565
June 30, 2032	19,708,565	9,844,860	1,849,598	11,694,458	0	9,844,860	9,844,860	1,276,346	22,834,509
June 30, 2033	22,834,509	10,221,404	1,747,877	11,969,281	0	10,255,080	10,255,080	1,466,741	26,015,451
June 30, 2034	26,015,451	10,653,512	1,651,211	12,304,723	0	10,737,773	10,737,773	1,660,694	29,243,095
June 30, 2035	29,243,095	10,763,758	1,556,936	12,320,694	0	10,917,730	10,917,730	1,857,611	32,503,670
June 30, 2036	32,503,670	11,034,799	1,469,836	12,504,635	0	11,286,629	11,286,629	2,056,786	35,778,462
June 30, 2037	35,778,462	11,366,933	1,298,045	12,664,978	0	11,741,658	11,741,658	2,254,258	38,956,040
June 30, 2038	38,956,040	11,572,461	1,221,762	12,794,223	0	12,030,831	12,030,831	2,448,625	42,168,057
June 30, 2039	42,168,057	11,697,389	1,151,677	12,849,066	0	12,257,586	12,257,586	2,645,312	45,404,849
June 30, 2040	45,404,849	11,997,367	1,017,117	13,014,484	0	12,677,048	12,677,048	2,841,567	48,583,852
June 30, 2041	48,583,852	12,223,732	957,674	13,181,406	0	12,993,773	12,993,773	3,036,535	51,808,020
June 30, 2042	51,808,020	12,300,555	896,046	13,196,601	0	13,171,394	13,171,394	3,234,233	55,067,460
June 30, 2043	55,067,460	12,605,701	839,185	13,444,886	0	13,642,311	13,642,311	3,434,259	58,304,294
June 30, 2044	58,304,294	12,771,591	778,023	13,549,614	0	14,020,441	14,020,441	3,632,754	61,466,221
June 30, 2045	61,466,221	12,844,438	727,523	13,571,961	0	14,353,839	14,353,839	3,826,938	64,511,281
June 30, 2046	64,511,281	13,016,969	679,066	13,696,035	0	14,856,614	14,856,614	4,013,950	67,364,652
June 30, 2047	67,364,652	13,252,485	629,106	13,881,591	0	15,477,375	15,477,375	4,189,050	69,957,918
June 30, 2048	69,957,918	13,312,089	582,525	13,894,614	0	15,849,971	15,849,971	4,348,154	72,350,715
June 30, 2049	72,350,715	13,217,805	537,854	13,755,659	0	16,111,518	16,111,518	4,494,906	74,489,762
June 30, 2050	74,489,762	13,331,795	491,055	13,822,850	0	16,625,046	16,625,046	4,625,886	76,313,452
June 30, 2051	76,313,452	13,271,080	450,540	13,721,620	0	16,907,071	16,907,071	4,737,538	77,865,539
June 30, 2052	77,865,539	13,177,974	410,622	13,588,596	0	17,183,902	17,183,902	4,832,395	79,102,628
June 30, 2053	79,102,628	13,250,598	368,630	13,619,228	0	17,719,649	17,719,649	4,907,690	79,909,897
June 30, 2054	79,909,897	13,231,349	325,609	13,556,958	0	18,207,974	18,207,974	4,956,349	80,215,230
June 30, 2055	80,215,230	12,908,017	288,242	13,196,259	0	18,443,387	18,443,387	4,974,110	79,942,212
June 30, 2056	79,942,212	12,716,943	252,480	12,969,423	0	18,879,217	18,879,217	4,956,120	78,988,538
June 30, 2057	78,988,538	12,719,269	217,844	12,937,113	0	19,558,135	19,558,135	4,896,032	77,263,548
June 30, 2058	77,263,548	12,499,442	186,183	12,685,625	0	19,990,269	19,990,269	4,788,289	74,747,193
June 30, 2059	74,747,193	12,326,495	157,708	12,484,203	0	20,508,160	20,508,160	4,631,659	71,354,895
June 30, 2060	71,354,895	12,105,793	126,445	12,232,238	0	21,020,691	21,020,691	4,420,723	66,987,165
June 30, 2061	66,987,165	11,894,837	98,701	11,993,538	0	21,539,839	21,539,839	4,149,514	61,590,378

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

FIDUCIARY POSITION PROJECTION DISCLOSURES (CONTINUED)

**Table 2: Projection of OPEB Plan's Fiduciary Net Position using a July 1 2021 Valuation 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 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 [III. + III.]	V. Administrative Expenses Withdrawn from the Trust for Current Plan Members	VI. Benefit Payments Withdrawn from the Trust	VII. Trust Withdrawals [V. + VI.]	VIII. Investment Earnings	IX. Ending Fiduciary Net Position for Current Plan Members
June 30, 2062	61,590,378	11,500,798	78,237	11,579,035	0	21,901,048	21,901,048	3,814,829	55,083,194
June 30, 2063	55,083,194	11,074,084	58,632	11,132,716	0	22,324,458	22,324,458	3,411,437	47,302,889
June 30, 2064	47,302,889	10,777,681	43,290	10,820,971	0	22,931,387	22,931,387	2,929,369	38,121,842
June 30, 2065	38,121,842	10,498,887	29,795	10,528,682	0	23,625,547	23,625,547	2,360,650	27,385,627
June 30, 2066	27,385,627	10,239,888	20,247	10,260,135	0	24,413,612	24,413,612	1,695,788	14,927,938
June 30, 2067	14,927,938	10,067,664	12,283	10,079,947	0	25,354,196	25,354,196	924,414	578,103
June 30, 2068	578,103	9,866,561	6,149	9,872,710	0	26,282,718	26,282,718	35,972	0
June 30, 2069	0	9,662,944	3,201	9,666,145	0	27,255,478	27,255,478	98	0
June 30, 2070	0	9,470,754	1,540	9,472,294	0	28,297,511	28,297,511	47	0
June 30, 2071	0	9,247,102	635	9,247,737	0	29,308,787	29,308,787	19	0
June 30, 2072	0	9,020,147	252	9,020,399	0	30,355,504	30,355,504	8	0
June 30, 2073	0	8,777,636	0	8,777,636	0	31,459,194	31,459,194	0	0
June 30, 2074	0	8,511,328	0	8,511,328	0	32,583,907	32,583,907	0	0
June 30, 2075	0	8,263,311	0	8,263,311	0	33,782,077	33,782,077	0	0
June 30, 2076	0	7,986,068	0	7,986,068	0	35,000,482	35,000,482	0	0
June 30, 2077	0	7,681,955	0	7,681,955	0	36,242,897	36,242,897	0	0
June 30, 2078	0	7,384,638	0	7,384,638	0	37,573,294	37,573,294	0	0
June 30, 2079	0	7,063,015	0	7,063,015	0	38,914,972	38,914,972	0	0
June 30, 2080	0	6,731,431	0	6,731,431	0	40,299,685	40,299,685	0	0
June 30, 2081	0	6,385,413	0	6,385,413	0	41,734,523	41,734,523	0	0
June 30, 2082	0	6,035,197	0	6,035,197	0	43,208,129	43,208,129	0	0
June 30, 2083	0	5,682,060	0	5,682,060	0	44,740,231	44,740,231	0	0
June 30, 2084	0	5,311,673	0	5,311,673	0	46,315,849	46,315,849	0	0
June 30, 2085	0	4,937,543	0	4,937,543	0	47,951,458	47,951,458	0	0
June 30, 2086	0	4,563,832	0	4,563,832	0	49,647,923	49,647,923	0	0
June 30, 2087	0	4,184,594	0	4,184,594	0	51,409,086	51,409,086	0	0
June 30, 2088	0	3,814,032	0	3,814,032	0	53,269,545	53,269,545	0	0
June 30, 2089	0	3,452,490	0	3,452,490	0	55,195,102	55,195,102	0	0
June 30, 2090	0	3,101,691	0	3,101,691	0	57,207,331	57,207,331	0	0
June 30, 2091	0	2,766,607	0	2,766,607	0	59,326,693	59,326,693	0	0
June 30, 2092	0	2,446,896	0	2,446,896	0	61,532,908	61,532,908	0	0
June 30, 2093	0	2,145,383	0	2,145,383	0	63,837,883	63,837,883	0	0
June 30, 2094	0	1,863,475	0	1,863,475	0	66,254,239	66,254,239	0	0
June 30, 2095	0	1,602,430	0	1,602,430	0	68,784,133	68,784,133	0	0
June 30, 2096	0	1,363,091	0	1,363,091	0	71,428,809	71,428,809	0	0

**APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS**

**BENEFIT PAYMENT PROJECTION DISCLOSURES**

**Table 3: Actuarial Present Values of Projected Benefit Payments using a July 1, 2021 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 [6.19%]	VI. Present Value of Unfunded Benefit Payments using the Municipal Bond Rate [4.09%]	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [5.74%]	
June 30, 2022	5,256,775	6,103,903	5,256,775	847,128	5,256,775	847,128	6,103,903	<b>Sum of Column V.</b>
June 30, 2023	5,240,906	6,034,108	5,240,906	793,202	4,935,404	762,038	5,706,469	153,753,011
June 30, 2024	5,954,256	6,532,276	5,954,256	578,020	5,280,320	533,493	5,842,158	
June 30, 2025	6,770,462	6,959,668	6,770,462	189,206	5,654,152	167,770	5,886,426	<b>Sum of Column VI.</b>
June 30, 2026	7,661,229	7,466,429	7,466,429	0	5,871,897	0	5,972,147	20,991,091
June 30, 2027	8,625,839	7,817,798	7,817,798	0	5,789,837	0	5,913,660	
June 30, 2028	9,666,783	8,248,152	8,248,152	0	5,752,478	0	5,900,421	<b>Sum of Column VII.</b>
June 30, 2029	10,747,109	8,629,630	8,629,630	0	5,667,700	0	5,838,118	[V. + VI.]
June 30, 2030	13,665,963	9,079,112	9,079,112	0	5,615,319	0	5,808,694	174,744,102
June 30, 2031	16,652,314	9,628,550	9,628,550	0	5,608,004	0	5,825,730	
June 30, 2032	19,708,565	9,844,860	9,844,860	0	5,399,746	0	5,633,177	
June 30, 2033	22,834,509	10,221,404	10,221,404	0	5,279,475	0	5,531,066	
June 30, 2034	26,015,451	10,653,512	10,653,512	0	5,181,904	0	5,451,870	
June 30, 2035	29,243,095	10,763,758	10,763,758	0	4,930,340	0	5,209,199	
June 30, 2036	32,503,670	11,034,799	11,034,799	0	4,759,855	0	5,050,401	
June 30, 2037	35,778,462	11,366,933	11,366,933	0	4,617,310	0	4,919,932	
June 30, 2038	38,956,040	11,572,461	11,572,461	0	4,426,779	0	4,736,919	
June 30, 2039	42,168,057	11,697,389	11,697,389	0	4,213,737	0	4,528,074	
June 30, 2040	45,404,849	11,997,367	11,997,367	0	4,069,872	0	4,392,026	
June 30, 2041	48,583,852	12,223,732	12,223,732	0	3,904,946	0	4,231,918	
June 30, 2042	51,808,020	12,300,555	12,300,555	0	3,700,431	0	4,027,286	
June 30, 2043	55,067,460	12,605,701	12,605,701	0	3,571,174	0	3,903,095	
June 30, 2044	58,304,294	12,771,591	12,771,591	0	3,407,261	0	3,739,741	
June 30, 2045	61,466,221	12,844,438	12,844,438	0	3,226,947	0	3,556,854	
June 30, 2046	64,511,281	13,016,969	13,016,969	0	3,079,661	0	3,408,907	
June 30, 2047	67,364,652	13,252,485	13,252,485	0	2,952,615	0	3,282,140	
June 30, 2048	69,957,918	13,312,089	13,312,089	0	2,793,007	0	3,117,887	
June 30, 2049	72,350,715	13,217,805	13,217,805	0	2,611,569	0	2,927,709	
June 30, 2050	74,489,762	13,331,795	13,331,795	0	2,480,546	0	2,792,618	
June 30, 2051	76,313,452	13,271,080	13,271,080	0	2,325,312	0	2,628,957	
June 30, 2052	77,865,539	13,177,974	13,177,974	0	2,174,403	0	2,468,768	
June 30, 2053	79,102,628	13,250,598	13,250,598	0	2,058,938	0	2,347,586	
June 30, 2054	79,909,897	13,231,349	13,231,349	0	1,936,102	0	2,216,892	
June 30, 2055	80,215,230	12,908,017	12,908,017	0	1,778,689	0	2,045,287	
June 30, 2056	79,942,212	12,716,943	12,716,943	0	1,650,212	0	1,905,601	
June 30, 2057	78,988,538	12,719,269	12,719,269	0	1,554,302	0	1,802,461	
June 30, 2058	77,263,548	12,499,442	12,499,442	0	1,438,402	0	1,675,130	
June 30, 2059	74,747,193	12,326,495	12,326,495	0	1,335,813	0	1,562,255	
June 30, 2060	71,354,895	12,105,793	12,105,793	0	1,235,423	0	1,450,975	
June 30, 2061	66,987,165	11,894,837	11,894,837	0	1,143,134	0	1,348,279	

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

BENEFIT PAYMENT PROJECTION DISCLOSURES (CONTINUED)

**Table 3: Actuarial Present Values of Projected Benefit Payments using a July 1, 2021 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 [6.19%]	VI. Present Value of Unfunded Benefit Payments using the Municipal Bond Rate [4.09%]	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [5.74%]
June 30, 2062	61,590,378	11,500,798	11,500,798	0	1,040,838	0	1,232,831
June 30, 2063	55,083,194	11,074,084	11,074,084	0	943,799	0	1,122,633
June 30, 2064	47,302,889	10,777,681	10,777,681	0	864,994	0	1,033,260
June 30, 2065	38,121,842	10,498,887	10,498,887	0	793,501	0	951,880
June 30, 2066	27,385,627	10,239,888	10,239,888	0	728,813	0	877,987
June 30, 2067	14,927,938	10,067,664	10,067,664	0	674,786	0	816,350
June 30, 2068	578,103	9,866,561	578,103	9,288,458	36,489	1,469,691	756,602
June 30, 2069	0	9,662,944	0	9,662,944	0	1,468,876	700,754
June 30, 2070	0	9,470,754	0	9,470,754	0	1,383,099	649,524
June 30, 2071	0	9,247,102	0	9,247,102	0	1,297,381	599,751
June 30, 2072	0	9,020,147	0	9,020,147	0	1,215,818	553,265
June 30, 2073	0	8,777,636	0	8,777,636	0	1,136,647	509,157
June 30, 2074	0	8,511,328	0	8,511,328	0	1,058,860	466,902
June 30, 2075	0	8,263,311	0	8,263,311	0	987,616	428,683
June 30, 2076	0	7,986,068	0	7,986,068	0	916,981	391,805
June 30, 2077	0	7,681,955	0	7,681,955	0	847,407	356,421
June 30, 2078	0	7,384,638	0	7,384,638	0	782,605	324,022
June 30, 2079	0	7,063,015	0	7,063,015	0	719,112	293,083
June 30, 2080	0	6,731,431	0	6,731,431	0	658,426	264,157
June 30, 2081	0	6,385,413	0	6,385,413	0	600,042	236,972
June 30, 2082	0	6,035,197	0	6,035,197	0	544,850	211,814
June 30, 2083	0	5,682,060	0	5,682,060	0	492,816	188,592
June 30, 2084	0	5,311,673	0	5,311,673	0	442,592	166,726
June 30, 2085	0	4,937,543	0	4,937,543	0	395,254	146,567
June 30, 2086	0	4,563,832	0	4,563,832	0	350,984	128,118
June 30, 2087	0	4,184,594	0	4,184,594	0	309,175	111,093
June 30, 2088	0	3,814,032	0	3,814,032	0	270,725	95,758
June 30, 2089	0	3,452,490	0	3,452,490	0	235,434	81,974
June 30, 2090	0	3,101,691	0	3,101,691	0	203,203	69,646
June 30, 2091	0	2,766,607	0	2,766,607	0	174,129	58,749
June 30, 2092	0	2,446,896	0	2,446,896	0	147,956	49,139
June 30, 2093	0	2,145,383	0	2,145,383	0	124,628	40,744
June 30, 2094	0	1,863,475	0	1,863,475	0	103,998	33,469
June 30, 2095	0	1,602,430	0	1,602,430	0	85,916	27,218
June 30, 2096	0	1,363,091	0	1,363,091	0	70,212	21,895

APPENDIX II – PLAN PROVISIONS

<u>Plan Year</u>	July 1 through June 30.
<u>Premium Effective Date</u>	<b>Non-GIC:</b> <b>Medicare Supplement Plans:</b> effective January 1, 2022 <b>Active Plans:</b> effective July 1, 2022 <b>Dental Plans:</b> N/A <b>GIC:</b> <b>Medicare Supplement Plans:</b> effective July 1, 2022 <b>Active Plans:</b> effective July 1, 2022 <b>Dental Plans:</b> N/A
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Benefits Offered</u>	Comprehensive Medical and \$5,000 of Group Term Life Insurance.
<u>Medicare Part A</u>	To the best of our knowledge the Town does not pay any Medicare Part A premiums or penalties.
<u>Medicare Part B</u>	Medicare Part B Premium reimbursements by the Town 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.

APPENDIX II – PLAN PROVISIONS

Eligibility

Hire Date	Eligibility
Before April 2, 2012	<ul style="list-style-type: none"> <li>• Age 55 with 10 years of creditable service</li> <li>• 20 years of service regardless of age</li> </ul>
On or after April 2, 2012	<ul style="list-style-type: none"> <li>• Age 60 with 10 years of creditable service</li> </ul>

Participant Contributions

Group	Individual	Two-Person / Family
<b>Medical</b>	<ul style="list-style-type: none"> <li>• Several grandfathered retirees pay 17%-18%</li> <li>• All other Town retirees pay 25% of premiums</li> <li>• Retired Teachers pay 10%-15% of premiums based on retirement date</li> </ul>	<ul style="list-style-type: none"> <li>• Several grandfathered retirees pay 17%-18%</li> <li>• All other Town retirees pay 25% of premiums</li> <li>• Retired Teachers pay 10%-15% of premiums based on retirement date</li> </ul>
<b>Dental</b>	N/A	N/A
<b>Life</b>	<ul style="list-style-type: none"> <li>• Town retirees pay 25% of premiums</li> <li>• Retired Teachers pay 40% of premiums</li> </ul>	N/A

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONSPre-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

Assumption Experience Study

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.

Discount Rate

5.74% per annum (previously 4.75%)

Net Long Term Rate of Return

6.19% (based on investment policy)

Municipal Bond Rate

4.09% as of June 30, 2022 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)

Actuarial Cost Method

Individual Entry Age Normal

Asset-Valuation Method

Market Value of Assets as of the Measurement Date, June 30, 2022

## 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:

#### **Non-Public Safety Employees**

<b>Service</b>	<b>Male</b>	<b>Female</b>
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%

#### **Public Safety Employees**

<b>Service</b>	<b>Male</b>	<b>Female</b>
0	9.00%	9.00%
5	6.00%	6.00%
10	3.50%	3.50%
15	2.00%	2.00%
20	1.50%	1.50%
25	1.50%	1.50%
30	1.50%	1.50%

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Retirement Rates for Eligible Employees

Age	Standard Male	Standard Female	Male Teachers	Female Teachers	Public Safety
45 - 49	0.00%	0.00%	0.00%	0.00%	6.00%
50 - 51	3.00%	3.00%	2.00%	1.50%	6.00%
52	3.00%	3.00%	2.00%	1.50%	6.00%
53	3.00%	3.00%	2.00%	1.50%	7.50%
54	3.00%	3.50%	2.00%	2.00%	15.00%
55	3.50%	5.00%	6.00%	5.00%	25.00%
56	3.50%	5.00%	20.00%	15.00%	15.00%
57	4.00%	5.50%	40.00%	35.00%	15.00%
58	5.00%	6.00%	50.00%	35.00%	15.00%
59	6.00%	6.50%	50.00%	35.00%	15.00%
60	9.00%	7.50%	40.00%	35.00%	20.00%
61	11.00%	10.00%	40.00%	35.00%	20.00%
62	15.00%	15.00%	35.00%	35.00%	20.00%
63	15.00%	15.00%	35.00%	35.00%	20.00%
64	16.00%	15.00%	35.00%	35.00%	30.00%
65	20.00%	20.00%	35.00%	35.00%	50.00%
66	20.00%	20.00%	40.00%	35.00%	25.00%
67	20.00%	20.00%	40.00%	30.00%	25.00%
68	20.00%	20.00%	40.00%	30.00%	25.00%
69	20.00%	20.00%	40.00%	30.00%	25.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%	100.00%	100.00%

Permanent Disability Rates

Age	Standard	Teachers	Public Safety
20	0.01%	0.05%	0.20%
30	0.01%	0.07%	0.21%
40	0.07%	0.21%	0.71%
50	0.13%	0.42%	1.10%
60	0.12%	0.50%	0.80%

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 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 2030:	21%
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:

<b>Year</b>	<b>Rate</b>
2021	9.00%
2022	8.00%
2023	6.50%
2024	5.00%
2025	4.96%
2026	4.92%
2027	4.88%
2028	4.84%
2029	4.81%
2030 - 2037	4.77%
2050	4.38%
2060+	3.63%

### 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.

### 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.

<b>Impact of Implicit Subsidy</b>		
	<b>As of the Measurement Date</b>	
<b>Impact on Liability</b>	<b><u>June 30, 2022</u></b>	<b><u>June 30, 2021</u></b>
I. Total OPEB Liability	153,808,252	166,842,521
II. Total OPEB Liability (Excluding Implicit Subsidy)	<u>117,280,042</u>	<u>137,576,558</u>
III. Liability from Implicit Subsidy [I. - II.]	36,528,210	29,265,963

	<b>For the Measurement Period Ending</b>	
<b>Impact on Payments</b>	<b><u>June 30, 2022</u></b>	<b><u>June 30, 2021</u></b>
IV. Employer Payments (Including Implicit Subsidy)	6,103,903	5,671,413
V. Actual Employer Payments	<u>4,672,732</u>	<u>4,363,041</u>
VI. Implicit Subsidy [IV. - V.]	1,431,171	1,308,372

### APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

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

#### ANNUAL PER CAPITA CLAIMS\* (Non-GIC)

ACTIVE EMPLOYEES			RETIREE - NOT MEDICARE ELIGIBLE			RETIREE - MEDICARE ELIGIBLE		
Age Bracket	Female	Male	Age Bracket	Female	Male	Age Bracket	Female	Male
24 & Under	4,382	2,762	44 & Under	8,612	5,643	65 to 69	3,204	3,290
25 to 29	6,464	2,874	45 to 49	9,460	7,125	70 to 74	3,780	3,942
30 to 34	8,168	3,607	50 to 54	11,128	9,383	75 to 79	4,385	4,656
35 to 39	8,414	4,529	55 to 59	12,864	12,200	80 to 84	5,030	5,351
40 to 44	8,612	5,643	60 to 64	15,308	15,655	85 to 89	5,622	5,962
45 to 49	9,460	7,125	65 to 69	18,350	19,528	90 & Over	5,622	5,962
50 to 54	11,128	9,383	70 to 74	21,639	23,401			
55 to 59	12,864	12,200	75 to 79	25,131	27,639			
60 to 64	15,308	15,655	80 to 84	28,814	31,768			
65 to 69	18,350	19,528	85 to 89	32,891	36,363			
70 & Over	21,639	23,401	90 & Over	32,891	36,363			

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

### APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

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

#### ANNUAL PER CAPITA CLAIMS\* (GIC)

ACTIVE EMPLOYEES			RETIREE - NOT MEDICARE ELIGIBLE			RETIREE - MEDICARE ELIGIBLE		
Age Bracket	Female	Male	Age Bracket	Female	Male	Age Bracket	Female	Male
24 & Under	5,519	3,479	44 & Under	10,848	7,108	65 to 69	3,281	3,368
25 to 29	8,142	3,620	45 to 49	11,916	8,975	70 to 74	3,870	4,037
30 to 34	10,289	4,544	50 to 54	14,017	11,820	75 to 79	4,490	4,767
35 to 39	10,599	5,706	55 to 59	16,205	15,367	80 to 84	5,150	5,479
40 to 44	10,848	7,108	60 to 64	19,283	19,720	85 to 89	5,756	6,104
45 to 49	11,916	8,975	65 to 69	23,115	24,597	90 & Over	5,756	6,104
50 to 54	14,017	11,820	70 to 74	27,258	29,477			
55 to 59	16,205	15,367	75 to 79	31,656	34,815			
60 to 64	19,283	19,720	80 to 84	36,295	40,017			
65 to 69	23,115	24,597	85 to 89	41,431	45,805			
70 & Over	27,258	29,477	90 & Over	41,431	45,805			

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

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

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	<u>3.0%</u>	<u>4.0%</u>
Total	48.0%	52.0%

Additional Comments

The liabilities being reported as of the Measurement Date of June 30, 2022 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.

APPENDIX IV – PLAN DEMOGRAPHICS

Active Employees

Valuation Date	July 1, 2021	July 1, 2019
<b>A. Average Age at Hire</b>	34.37	34.60
<b>B. Average Service</b>	<u>10.59</u>	<u>11.53</u>
<b>C. Average Current Age</b>	44.96	46.13

Retired Employees & Spouses

Valuation Date	July 1, 2021	July 1, 2019
<b>A. Under Age 65</b>	188	136
<b>B. Age 65 &amp; Over</b>	<u>605</u>	<u>590</u>
<b>C. Total</b>	793	726

Average Service Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-24	35	4								39
25-29	66	16	6							88
30-34	53	21	17	5						96
35-39	49	19	26	8	5					107
40-44	37	18	11	22	12					100
45-49	26	14	21	23	34	6				124
50-54	26	12	23	20	19	13	6			119
55-59	24	12	13	22	17	1	5			94
60-64	13	7	9	12	24	1	5			71
65-69	1	5	3	6	8	5				28
70+	1	2	3	2	3	1	1	1		14
<b>Total</b>	331	130	132	120	122	27	17	1		880

APPENDIX IV – PLAN DEMOGRAPHICS

Plan Offerings - Non-GIC

	Number of Contracts			
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
HMO	271		365	636
PPO	21		27	48
Medex LIS	2			2
Managed Blue	8	6		14
Medex	100	78		178
Total	402	84	392	878

	Per Contract Costs (monthly)		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
HMO	816.56		2,140.06
PPO	1,464.36		3,644.18
Medex LIS	247.24	494.48	
Managed Blue	352.16	704.32	
Medex	379.64	759.28	
Dental Plan	N/A		N/A

APPENDIX IV – PLAN DEMOGRAPHICS

Plan Offerings - GIC

	Number of Contracts			
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
Harvard Pilgrim	1			1
Harvard Primary Choice	1		1	2
Allways Health Partners			1	1
Tufts Navigator	2		1	3
Unicare Basic w/ CIC*	27		17	44
Unicare Comm Choice	1		1	2
Unicare Plus	2		1	3
Unicare OME w/ CIC*	105	102		207
Tufts Medicare Complement	3	3		6
Harvard Senior	2	3		5
Total	144	108	22	274

Per Contract Costs (monthly)

	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Harvard Pilgrim	1,036.03		2,534.63
Harvard Primary Choice	746.72		1,909.58
Allways Health Partners	669.71		1,602.13
Tufts Navigator	891.16		2,183.15
Unicare Basic w/ CIC*	1,239.09		2,752.65
Unicare Comm Choice	623.83		1,553.41
Unicare Plus	811.39		1,938.75
Unicare OME w/ CIC*	413.37	826.74	
Tufts Medicare Complement	406.02	812.04	
Harvard Senior	423.97	847.94	
Dental Plan	N/A		N/A

\*These rates represent the unsubsidized Indemnity premium rates

APPENDIX IV – PLAN DEMOGRAPHICS

	Active Plan Average Premium Calculation (Non-GIC)					
	Single	Two-Person	Family	Number of Participants	Total Premiums Paid	Claims Without Children
HMO	271		365	1,001	12,028,915.92	9,808,518.72
PPO	21		27	75	1,549,733.04	1,317,924.00
Total	292	0	392	1,076	13,578,648.96	11,126,442.72
Blended Average Monthly Rate:						\$ 861.71

	Medicare Supplement Plan Average Premium Calculation (Non-GIC)					
	Single	Two-Person	Family	Number of Participants	Total Premiums Paid	Claims Without Children
Medex LIS	2			2	5,933.76	5,933.76
Managed Blue	8	6		20	84,518.40	84,518.40
Medex	100	78		256	1,166,254.08	1,166,254.08
Total	110	84	0	278	1,256,706.24	1,256,706.24
Blended Average Monthly Rate:						\$ 376.71

### APPENDIX IV – PLAN DEMOGRAPHICS

	Active Plan Average Premium Calculation (GIC)					
	Single	Two-Person	Family	Number of Participants	Total Premiums Paid	Claims Without Children
Harvard Pilgrim	1			1	12,432.36	12,432.36
Harvard Primary Choice	1		1	3	31,875.60	26,881.92
Allways Health Partners			1	2	19,225.56	16,073.04
Tufts Navigator	2		1	4	47,585.64	42,775.68
Unicare Basic w/ CIC*	27		17	61	916,353.84	863,701.44
Unicare Comm Choice	1		1	3	26,126.88	22,457.88
Unicare Plus	2		1	4	42,738.36	38,946.72
<b>Total</b>	<b>34</b>	<b>0</b>	<b>22</b>	<b>78</b>	<b>1,096,338.24</b>	<b>1,023,269.04</b>
<b>Blended Average Monthly Rate:</b>						<b>\$ 1,093.24</b>

	Medicare Supplement Plan Average Premium Calculation (GIC)					
	Single	Two-Person	Family	Number of Participants	Total Premiums Paid	Claims Without Children
Unicare OME w/ CIC*	105	102		309	1,490,653.08	1,490,653.08
Tufts Medicare Complement	3	3		9	43,850.16	43,850.16
Harvard Senior	2	3		8	40,701.12	40,701.12
<b>Total</b>	<b>110</b>	<b>108</b>	<b>0</b>	<b>326</b>	<b>1,575,204.36</b>	<b>1,575,204.36</b>
<b>Blended Average Monthly Rate:</b>						<b>\$ 402.66</b>

## 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.

## 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:

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

Medical inflation and claims cost assumptions – 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?

Discount rate assumption – 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 Town, 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 Town'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.

## APPENDIX VI – ASOP 41 DISCLOSURES

The Actuarial Standards Board (the “ASB”), vested by the U.S.-based actuarial organizations<sup>1</sup>, 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 Conduct<sup>2</sup>, 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.

### Identification of the Responsible Actuary

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

### Identification of Actuarial Documents

The date of this document is December 23, 2022 and its subject is the Town of North Attleborough's GASB 75 OPEB liabilities.

---

<sup>1</sup> The 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.

<sup>2</sup> These organizations adopted identical *Codes of Professional Conduct* effective January 1, 2001

## APPENDIX VI – ASOP 41 DISCLOSURES

### Disclosures in Actuarial Reports

- ✓ The contents of this report are intended for the use of the officers, employees, and elected officials of the Town and the Town's appointed auditor. The Town may distribute this report to those parties that have a legal right to require the Town 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 Town notify Odyssey Advisors to whom it was distributed.
- ✓ The purpose of this engagement was to provide the Town 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 Town. 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 Town of North Attleborough 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 Town and any entity or individual related to the Town. There is nothing in our relationship with the Town that would impair or seem to impair the objectivity of our work.
- ✓ The Town 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, 2022.
- ✓ The various documents comprising the actuarial report are contained within the document to which these disclosures are attached.

## 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.

### Actuarial Findings

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.

## GLOSSARY

Accrual Accounting – 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.

Actuarially Determined Contribution – 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.

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

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

Discount Rate – 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.

Entry Age Normal – 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.

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

## 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.”

Implicit Subsidy – 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.

Irrevocable Contribution – 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.

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

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

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

Service Cost – 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.

Total OPEB Liability (TOL) – 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.