

Town of Needham

Actuarial Valuation Report (GASB 75)

Prepared for the Year Ending June 30, 2024

Prepared by:
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Overview of GASB 74 and 75

GASB - Acronym that stands for Governmental Accounting Standards Board. This is the accounting board that sets standards for governmental entities. Following GASB standards allows for the preparation of financial statements that are in conformity with Generally Accepted Accounting Principles (GAAP).

GASB statements 74 and 75, establish the reporting standards for Other Postemployment Benefit (“OPEB”) plans. It is 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 the 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.

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 per capita 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”).

Actuarial Valuation Opinion

This report presents results of the actuarial valuation of the Town of Needham Retiree Health Benefit Program ("the Plan") as of July 1, 2023. In our opinion, this report is complete and accurate and represents fairly the actuarial position of the Plan for the purposes stated herein.

This valuation has been prepared in accordance with generally accepted actuarial principles and practices, per applicable ASOPs #1, #4, #6, #21, #23, #27, #34, #35, #41, #44, and #51. To the best of our knowledge, the results fairly reflect the actuarial condition and funding requirements for the specified plan. This report also contains disclosures for the fiscal year ending June 30, 2024, to comply with Statement No. 74 and 75 of the Governmental Accounting Standards Board (GASB).

It is our understanding that the Plan is a governmental plan, within the meaning of section 414(d) of the Internal Revenue Code (IRC), and as such is neither subject to the minimum funding standards of IRC sections 412 and 430 nor covered by the Pension Benefit Guaranty Corporation under Title IV (Plan Termination Insurance) of the Employee Retirement Income Security Act of 1974 (ERISA).

This valuation is based on employee and plan financial data which were provided by the town. All information submitted to us has been reviewed for reasonableness and where applicable reviewed for consistency in comparison to previously provided information. We are not aware of any significant issues (except as noted below) with the information supplied and have accepted and relied on the data as provided without audit. Any errors in data may result in different results than those provided in this report. Where relevant data or details are missing, we made assumptions we believe are reasonable for the purpose of the measurement. The information presented in this report is based on:

- Representations made by the Town of Needham, related to participant data, financial information and plan descriptions used in this valuation.
- The plan provisions.
- The census / participant information was provided by the town. We noted a difference in overall head count from the prior year report. We exercised due diligence in working with the town through multiple iterations of the census to reconcile the differences. We are relying on the Town's explanations and signed attestation that the supplied census is accurate and dependable for purposes of this actuarial valuation.
- Actuarial assumptions included in this report.
- The plan provisions and other material assumptions are disclosed in their relevant sections. We relied solely on the benefit description as communicated by the town's business administrator.

Future experience may differ significantly from assumptions presented in this report due to factors such as:

- Plan experience differing from that anticipated by the economic or demographic assumptions,
- Changes in economic or demographic assumptions,
- Increases or decreases expected as part of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status), or
- Changes in plan provisions or applicable law.

To our knowledge there have been no significant events prior to the current year's measurement date or as of the date of this report which could materially affect the results contained herein.

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Actuarial Valuation Opinion (Continued)

To the best of our knowledge, no employee or contractor of Jefferson Solutions, Inc. is an officer or director of the employer. In addition, we are not aware of any relationship between the Jefferson Solutions, Inc. and the employer that may impair or appear to impair the objectivity of the work detailed in this report.

This report was prepared solely for the benefit and internal use of the plan sponsor. This report is not intended for the benefit of any other party and may not be relied upon by any third party for any purpose. The use of these results for any non-permitted purposes may be significantly different from those presented in this report. Jefferson Solutions, Inc. nor its employees or contractors accept any responsibility or liability with respect to any party other than the plan sponsor.

The undersigned with actuarial credentials meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein as of the specified date.

The undersigned project leader is a certified public accountant and an expert in OPEB and pension reporting.

Jefferson Solutions, Inc.



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Executive Summary

Governmental Accounting Requirements and Report Purposes

The Governmental Accounting Standards Board released the Statement of Governmental Accounting Standards No. 74 and No. 75 in June 2015. These statements require trusts (GASB No. 74) and employers (GASB No. 75) to accrue the cost of post-employment benefits other than pensions ("OPEB") while eligible employees are providing services to the employer.

The purposes of this actuarial valuation report are to provide the Town with:

- 1) Status of the retiree health benefit program's accrued liabilities (Total OPEB Liability) using the most recent census data and health plan rates;
- 2) Projected cash contributions (pay-as-you-go costs); and
- 3) Projected GASB No. 75 expense for the current fiscal year. GASB No. 75 disclosure information to fulfill the Town's financial reporting requirements is provided in this valuation report.

Funding Policy

Currently, the Town pre-funds its retiree health benefits in a trust held by the MassPRIM Retirement plan.

The key measures from the actuarial valuation of retiree health benefits with valuation date of July 1, 2023 and measurement date of June 30, 2024:

		June 30, 2024
Present Value of Future Benefits	\$	185,334,337
Total OPEB liability	\$	142,739,342
Assets held in Trust	\$	82,170,951
Net OPEB Liability	\$	60,568,391
		June 30, 2024
OPEB Expense	\$	9,279,773
Projected cash and implicit contributions	\$	4,941,183

OPEB Liability and Participant Information:

		June 30, 2024	Head Count
Active	\$	89,926,054	1,305
Inactive employees entitled to but not yet receiving benefits		-	100
Retired, Covered Spouses, and Survivors		52,813,288	751
	\$	142,739,342	2,156

Significant Changes from the Previous Actuarial Valuation

- Initial trend rates were advanced, the model for trends in subsequent years is based on the Getzen Model as updated through October 2023.
- Retirement and withdrawal rates are based on the Needham Contributory Actuarial Valuation Retirement System as of January 1, 2023.

Continued

Executive Summary (Continued)

Key Assumptions:

Census Collection Date	July 1, 2023
Discount Rate / Investment Rate of Return.....	6.25%
Year 1 Inflation Rate (Pre 65 / Post 65).....	12.31% / 12.92%
Year 2 Inflation Rate (Pre 65 / Post 65).....	7.50% / 4.54%
Ultimate Inflation Rate (Pre 65 / Post 65)	4.54%
Year Ultimate Inflation Rate is Reached (Pre 65 / Post 65)	2090 / 2024
Actuarial Cost Method	Entry Age Normal (Percent of Salary)

Discount Rate Comment:

Because this is a funded plan the discount rate is based on the expected long-term yield on plan assets. The town in consultation with its auditors has indicated that this rate of return 6.25% should be used in the actuarial study.

Cash Costs vs. Implicit Rate Subsidy:

GASB No. 75 requires that employers recognize the expected claims of the retiree population less the expected contributions by those retirees. This is not necessarily the same determination as the expected cash payments of the employer for retiree health benefits. The difference is that many post-employment health plans (including the Town's program) charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

Another way of considering the Implicit Rate Subsidy is to assume the retirees were removed from a blended plan and, instead, separately rated. In this scenario, the premium rate for the remaining active population would be lower; therefore, the retirees' premium rate is being subsidized by the premiums for active employees. Since the employer generally pays a portion of the premiums for the active employees, this subsidy creates a liability for the employer.

By comparison, the cash costs are the actual dollars paid by the employer to cover a portion or all the retirees' premium rates. This is sometimes referred to as the "Explicit Rate Subsidy". This is the benefit that is explicitly stated by the Town that will be paid on behalf of retirees.

GASB 75 reports are required to value both the Implicit Rate Subsidy and the Explicit Rate Subsidy. This report values both the Explicit Subsidy and the Implicit Rate Subsidy.

Overview of OPEB Plan

1. **PLAN TYPES:** The Town provides medical benefits to its eligible retirees. The benefits are provided through fully insured plans that are sponsored by a multi employer plan.
2. **ELIGIBILITY:** Employees must meet the following criteria to be eligible for access to the Town's medical benefits in retirement.
 - Hired prior to April 2, 2012:
 - (1) Age 55 with 10 years of creditable service, or
 - (2) 20 years of service regardless of age.
 - Hired on or after April 2, 2012:
 - (1) Age 60 with at least 10 years of Creditable Service.
3. **BENEFIT COST SHARING:** Retirees and their covered spouses contribute based on the medical plan elected in retirement. This valuation assumes that future retirees will elect a plan that will require a 32% contribution for pre 65 benefits, and a 50% contribution after age 65. Actual retirees' contribution is based on information provided by the town. See examples for the calculation of the per capita cost on page 27.
4. **DURATION OF BENEFITS:** The benefits in this plan are for the lifetime of the retiree.
5. **SURVIVING SPOUSE BENEFIT:** Surviving spouses are permitted to continue to receive coverage after the death of the eligible retired employee but are required to continue to pay 100% of the premiums.
6. **ANNUAL GROSS PREMIUMS AS PROVIDED BY THE TOWN:**

Plan Description	July 1, 2023		July 1, 2024	
	Single	Two Person	Single	Two Person
Harvard Pilgrim Benchmark Pre 65	\$14,628.00	\$38,124.00	\$16,428.00	\$42,828.00
Tufts Medicare Supplement PDP Plus Post 65	\$4,644.00	\$9,288.00	\$5,244.00	\$10,488.00

Summary of Assets

Asset Information

Assets in OPEB Trust June 30, 2023	\$	70,134,455
Activity:		
Net Investment Income		7,801,715
Contributions to the Trust		9,175,964
Benefit Payments from Trust		(4,941,183)
Admin. Expenses		
Balance June 30, 2024	\$	<u>82,170,951</u>

Expected Return on Assets:		6.25%
Balance June 30, 2023	\$	70,134,455
Average Contributions to the Trust		4,587,982
Average Benefit Payments from Trust		<u>(2,470,592)</u>
Weighted Balance	\$	72,251,845
Expected Return on Assets (average balance)		4,515,740
Actual Earning on Trust Assets		<u>7,801,715</u>
(Gain) / Loss attributable to expected return on investments	\$	<u>(3,285,975)</u>

Asset Allocation:	Target Allocation	Long Term Expected Real Rate of Return*
Global Equity	36.00%	7.25%
Core Fixed Income	15.00%	4.88%
Value Added Fixed Income	9.00%	5.16%
Private Equity	16.00%	9.71%
Real Estate	10.00%	6.17%
Timberland	4.00%	4.95%
Portfolio Completion Strategies	10.00%	6.17%
Overlay	<u>0.00%</u>	0.00%
Total Core	<u>100.00%</u>	

Real rate of Return	4.35%
Inflation Assumption	<u>2.44%</u>
Total Nominal Rate of Return	6.79%
Investment Expense	<u>0.50%</u>
Net Investment Return	<u>6.29%</u>

* Mean Geometric Returns based on 2024 Horizon Survey of Capital Market Assumptions.

Change in Net OPEB Liability

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (Asset) (c) = (a) - (b)
Balance at 06/30/2023	\$ 143,077,747	\$ 70,134,455	\$ 72,943,292
Changes Recognized for the Measurement Period:			
Service Cost	4,728,355	-	4,728,355
Interest on Total OPEB Liability at 6.25%	8,541,761	-	8,541,761
Changes of Assumptions	(2,133,412)	-	(2,133,412)
Difference Between Actual vs. Expected Experience	(6,533,926)	-	(6,533,926)
Contributions		9,175,964	(9,175,964)
Net Investment Income	-	7,801,715	(7,801,715)
Benefit Payments	(4,941,183)	(4,941,183)	-
Administrative Expense	-	-	-
Net Changes	\$ (338,405)	\$ 12,036,496	\$ (12,374,901)
Balance at 06/30/2024	\$ 142,739,342	\$ 82,170,951	\$ 60,568,391

Actuarially Determined Contribution

	Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
Service Cost with interest at 6.25%	\$ 938,561	\$ 2,887,630	\$ 482,189	\$ 626,812	\$ 45,673	\$ 43,012	\$ 5,023,877
30 year amortization of NOL at 6.25%	902,939	2,325,463	430,788	1,016,950	63,277	55,751	4,795,169
Actuarially Determined Contribution	\$ 1,841,500	\$ 5,213,093	\$ 912,977	\$ 1,643,762	\$ 108,950	\$ 98,763	\$ 9,819,045
Actual Contribution	1,166,393	2,652,200	309,919	713,954	47,768	50,949	4,941,183
Contribution Deficiency (Surplus)	<u>\$ 675,107</u>	<u>\$ 2,560,893</u>	<u>\$ 603,058</u>	<u>\$ 929,808</u>	<u>\$ 61,182</u>	<u>\$ 47,814</u>	<u>\$ 4,877,862</u>
Covered payroll	\$ 23,199,578	\$ 71,229,487	\$ 9,320,267	\$ 17,484,074	\$ 1,271,915	\$ 1,101,372	\$ 123,606,693
Actuarially determined contribution as a % of covered payroll	7.94%	7.32%	9.80%	9.40%	8.57%	8.97%	7.94%

Actuarial Gain / Loss

	Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
Total OPEB Liability, June 30, 2023	\$ 27,255,256	\$ 94,049,375	\$ 8,573,027	\$ 11,167,634	\$ 1,096,697	\$ 935,758	\$ 143,077,747
Fiduciary Net Position, June 30, 2023	13,360,096	46,101,521	4,202,363	5,474,198	537,583	458,694	70,134,455
Net OPEB Liability, June 30, 2023	\$ 13,895,160	\$ 47,947,854	\$ 4,370,664	\$ 5,693,436	\$ 559,114	\$ 477,064	\$ 72,943,292
Changes for the Year:							
Service Cost	883,352	2,717,769	453,825	589,941	42,986	40,482	4,728,355
Plan Change	-	-	-	-	-	-	-
Interest @ 6.25%	1,610,221	4,916,527	642,228	1,208,668	87,804	76,313	8,541,761
Contributions	(1,166,393)	(2,652,200)	(309,919)	(713,954)	(47,768)	(50,949)	(4,941,183)
Changes in Assumptions	(268,586)	(1,240,102)	(284,435)	(312,594)	(15,656)	(12,039)	(2,133,412)
Expected Total OPEB Liability, June 30, 2024	\$ 28,313,850	\$ 97,791,369	\$ 9,074,726	\$ 11,939,695	\$ 1,164,063	\$ 989,565	\$ 149,273,268
Gain attributable to experience	(1,523,290)	(15,536,517)	1,688,193	8,250,678	304,727	282,283	(6,533,926)
Total OPEB Liability, June 30, 2024	\$ 26,790,560	\$ 82,254,852	\$ 10,762,919	\$ 20,190,373	\$ 1,468,790	\$ 1,271,848	\$ 142,739,342
Fiduciary Net Position, June 30, 2024	15,652,960	54,013,478	4,923,574	6,413,681	629,843	537,415	82,170,951
Net OPEB Liability, June 30, 2024	\$ 11,137,600	\$ 28,241,374	\$ 5,839,345	\$ 13,776,692	\$ 838,947	\$ 734,433	\$ 60,568,391

Schedule of Deferred Outflows and Deferred Inflows of Resources

Differences between expected & actual experience

Measurement Period Ended	Initial Amount	Amortization Period	Annual Recognition	Amortized Through 06/30/2023	Amortized in Fiscal Year Ending						
					06/30/2024	06/30/2025	06/30/2026	06/30/2027	06/30/2028	06/30/2029	There After
06/30/2018	\$1,468,270	5.00	\$293,654	\$1,468,270	-	-	-	-	-	-	-
06/30/2019	(\$9,997,742)	5.99	(\$1,669,072)	(\$8,345,360)	(\$1,652,382)	-	-	-	-	-	-
06/30/2020	(\$123,044)	5.99	(\$20,541)	(\$82,164)	(\$20,541)	(\$20,339)	-	-	-	-	-
06/30/2021	(\$293,339)	6.59	(\$44,512)	(\$133,536)	(\$44,512)	(\$44,512)	(\$44,512)	(\$26,267)	-	-	-
06/30/2022	(\$3,714,901)	6.85	(\$542,321)	(\$1,084,642)	(\$542,321)	(\$542,321)	(\$542,321)	(\$542,321)	(\$460,975)	-	-
06/30/2023	(\$1,166,068)	6.68	(\$174,561)	(\$174,561)	(\$174,561)	(\$174,561)	(\$174,561)	(\$174,561)	(\$174,561)	(\$118,702)	-
06/30/2024	(\$6,533,926)	6.87	(\$951,081)	-	(\$951,081)	(\$951,081)	(\$951,081)	(\$951,081)	(\$951,081)	(\$951,081)	(\$827,440)
	<u>(\$20,360,750)</u>			<u>(\$8,351,993)</u>	<u>(\$3,385,398)</u>	<u>(\$1,732,814)</u>	<u>(\$1,712,475)</u>	<u>(\$1,694,230)</u>	<u>(\$1,586,617)</u>	<u>(\$1,069,783)</u>	<u>(\$827,440)</u>

Changes in assumptions

06/30/2018	(\$5,893,578)	5.00	(\$1,178,716)	(\$5,893,578)	-	-	-	-	-	-	-
06/30/2019	\$21,438,486	5.99	\$3,579,046	\$17,895,230	\$3,543,256	-	-	-	-	-	-
06/30/2020	\$4,633,778	5.99	\$773,585	\$3,094,340	\$773,585	\$765,853	-	-	-	-	-
06/30/2021	\$3,893,113	6.59	\$590,760	\$1,772,280	\$590,760	\$590,760	\$590,760	\$348,553	-	-	-
06/30/2022	\$3,950,140	6.85	\$576,662	\$1,153,324	\$576,662	\$576,662	\$576,662	\$576,662	\$490,168	-	-
06/30/2023	\$2,666,428	6.68	\$399,165	\$399,165	\$399,165	\$399,165	\$399,165	\$399,165	\$399,165	\$271,438	-
06/30/2024	(\$2,133,412)	6.87	(\$310,540)	-	(\$310,540)	(\$310,540)	(\$310,540)	(\$310,540)	(\$310,540)	(\$310,540)	(\$270,172)
	<u>\$28,554,955</u>			<u>\$18,420,761</u>	<u>\$5,572,888</u>	<u>\$2,021,900</u>	<u>\$1,256,047</u>	<u>\$1,013,840</u>	<u>\$578,793</u>	<u>(\$39,102)</u>	<u>(\$270,172)</u>

Continued

Schedule of Deferred Outflows and Deferred Inflows of Resources (Continued)

Measurement Period Ended	Initial Amount	Amortization Period	Annual Recognition	Amortized Through 06/30/2023	Amortized in Fiscal Year Ending						
					06/30/2024	06/30/2025	06/30/2026	06/30/2027	06/30/2028	06/30/2029	There After
Investments											
06/30/2018	(\$1,343,885)	5.00	(\$268,777)	(\$1,343,885)	-	-	-	-	-	-	-
06/30/2019	(\$1,119,369)	5.00	(\$223,874)	(\$1,119,369)	-	-	-	-	-	-	-
06/30/2020	\$727,427	5.00	\$145,485	\$581,940	\$145,487	-	-	-	-	-	-
06/30/2021	(\$12,623,789)	5.00	(\$2,524,758)	(\$7,574,274)	(\$2,524,758)	(\$2,524,757)	-	-	-	-	-
06/30/2022	\$6,349,536	5.00	\$1,269,907	\$2,539,814	\$1,269,907	\$1,269,907	\$1,269,908	-	-	-	-
06/30/2023	\$522,331	5.00	\$104,466	\$104,466	\$104,466	\$104,466	\$104,466	\$104,467	-	-	-
6/30/2024	(\$3,285,975)	5.00	(\$657,195)	-	(\$657,195)	(\$657,195)	(\$657,195)	(\$657,195)	(\$657,195)	(\$657,195)	-
	(\$10,773,724)			(\$6,811,308)	(\$1,662,093)	(\$1,807,579)	\$717,179	(\$552,728)	(\$657,195)		-
			Deferred Outflow	Deferred Inflow	Net	Amortization					
Differences between expected & actual experience			-	(\$8,623,359)	(\$8,623,359)	(\$3,385,398)					
Changes in assumptions			\$6,384,178	(\$1,822,872)	\$4,561,306	\$5,572,888					
Investments			\$2,853,214	(\$5,153,537)	(\$2,300,323)	(\$1,662,093)					
			\$9,237,392	(\$15,599,768)	(\$6,362,376)	\$525,397					
			06/30/2025	(\$1,518,493)							
			06/30/2026	\$260,751							
			06/30/2027	(\$1,233,118)							
			06/30/2028	(\$1,665,019)							
			06/30/2029	(\$1,108,885)							
			There After	(\$1,097,612)							
				(\$6,362,376)							

10-Year Projection of Employer Benefit Payments

Presented in this section are the projected employer benefit payments for the next ten years based on the program design effective in the 2023 - 2024 fiscal year. These projected benefit payments are based on the actuarial methods and assumptions are described in the section(s) Actuarial Methods on page 22 and Assumptions And Methodology beginning on page 23. If actual experience differs from those expected by the actuarial assumptions, the actual benefit payments will vary from those presented below.

Period	Explicit Subsidy	Implicit Subsidy	Total
06/30/2024	\$2,761,436	\$2,179,747	\$4,941,183
06/30/2025	\$2,934,026	\$2,315,981	\$5,250,007
06/30/2026	\$3,898,633	\$3,137,043	\$7,035,676
06/30/2027	\$4,362,451	\$3,583,112	\$7,945,563
06/30/2028	\$4,732,207	\$3,826,584	\$8,558,791
06/30/2029	\$5,124,392	\$4,154,369	\$9,278,761
06/30/2030	\$5,475,366	\$4,377,777	\$9,853,143
06/30/2031	\$5,834,602	\$4,631,206	\$10,465,808
06/30/2032	\$6,295,772	\$5,053,482	\$11,349,254
06/30/2033	\$6,606,280	\$5,173,939	\$11,780,219

Funding Schedule - Open Group

Projected funding schedule for the Fiscal Year Ending June 30, 2024 based on a discount rate of 6.25%

For the Fiscal Year	Measurement Date of	Total OPEB Liability	Fiduciary Net Position with an expected 6.25% return	Net OPEB Liability (Asset)	Funded Ratio	Service Cost	Employer Share of Benefit Payments (With Implicit Cost)	Trust Contributions Beyond Pay-as-you-go	Gross Trust Contributions	Benefit Payments Reimbursed from the Trust	Admin. & Investment Expenses Reimbursed from the Trust	Total Employer Payments Less Reimbursements
		I	II	[I - II]	[II / I]	V	VI	VII	[VI + VII]	IX	X	[VIII + IX + X]
2024	June 30, 2024	142,739,342	91,200,628	51,538,714	64%	4,846,230	6,150,613	2,048,667	8,199,280	6,150,613	-	2,048,667
2025	June 30, 2025	150,472,251	99,013,356	51,458,895	66%	4,973,074	7,035,676	1,105,630	8,141,306	7,035,676	-	1,105,630
2026	June 30, 2026	157,908,448	106,341,871	51,566,577	67%	5,100,027	7,945,563	594,667	8,540,230	7,945,563	-	594,667
2027	June 30, 2027	165,006,406	113,601,488	51,404,918	69%	5,228,432	8,558,791	457,669	9,016,460	8,558,791	-	457,669
2028	June 30, 2028	172,052,315	121,173,553	50,878,762	70%	5,391,872	9,278,761	240,486	9,519,247	9,278,761	-	240,486
2029	June 30, 2029	178,970,121	128,994,901	49,975,220	72%	5,539,801	9,853,143	196,928	10,050,071	9,853,143	-	196,928
2030	June 30, 2030	185,885,405	137,260,164	48,625,241	74%	5,725,818	10,465,808	144,687	10,610,495	10,465,808	-	144,687
2031	June 30, 2031	192,799,017	145,988,133	46,810,884	76%	5,920,539	11,349,254	-	11,202,170	11,349,254	-	(147,084)
2032	June 30, 2032	199,440,985	154,960,710	44,480,275	78%	6,117,767	11,780,219	46,619	11,826,838	11,780,219	-	46,619
2033	June 30, 2033	206,263,402	164,693,831	41,569,571	80%	6,344,888	12,171,984	314,357	12,486,341	12,171,984	-	314,357
2034	June 30, 2034	213,349,714	175,311,375	38,038,339	82%	6,572,660	12,808,173	374,446	13,182,619	12,808,173	-	374,446
2035	June 30, 2035	220,465,160	186,654,483	33,810,677	85%	6,830,962	13,527,561	390,163	13,917,724	13,527,561	-	390,163
2036	June 30, 2036	227,558,239	198,722,744	28,835,495	87%	7,117,127	13,823,281	870,539	14,693,820	13,823,281	-	870,539
2037	June 30, 2037	235,093,865	212,040,659	23,053,206	90%	7,404,827	14,170,084	1,343,110	15,513,194	14,170,084	-	1,343,110
2038	June 30, 2038	243,048,672	226,678,283	16,370,389	93%	7,727,763	14,669,075	1,709,185	16,378,260	14,669,075	-	1,709,185
2039	June 30, 2039	251,329,426	242,608,272	8,721,154	97%	8,055,031	15,231,835	2,059,729	17,291,564	15,231,835	-	2,059,729
2040	June 30, 2040	259,895,369	259,895,384	(15)	100%	8,416,055	15,598,296	-	8,416,055	15,598,296	-	(7,182,241)
2041	June 30, 2041	269,002,533	268,732,160	270,373	100%	8,803,492	16,372,441	-	8,885,361	16,372,441	-	(7,487,080)
2042	June 30, 2042	278,292,575	277,806,868	485,707	100%	9,216,901	17,138,698	-	9,380,837	17,138,698	-	(7,757,861)
2043	June 30, 2043	287,812,653	287,169,504	643,149	100%	9,640,668	17,122,667	-	9,903,943	17,122,667	-	(7,218,724)
2044	June 30, 2044	298,394,511	297,673,288	721,223	100%	10,085,086	17,759,089	-	10,456,218	17,759,089	-	(7,302,871)
2045	June 30, 2045	309,453,922	308,746,783	707,139	100%	10,557,685	18,413,486	-	11,039,290	18,413,486	-	(7,374,196)
2046	June 30, 2046	321,032,146	320,438,817	593,329	100%	11,055,140	18,206,487	-	11,654,876	18,206,487	-	(6,551,611)
2047	June 30, 2047	334,075,924	333,709,894	366,030	100%	11,583,290	18,454,902	-	12,304,789	18,454,902	-	(6,150,113)
2048	June 30, 2048	348,240,038	348,224,459	15,579	100%	12,126,071	19,149,875	-	12,990,943	19,149,875	-	(6,158,932)
2049	June 30, 2049	363,149,751	363,637,089	(487,338)	100%	12,709,251	19,753,067	-	12,709,251	19,753,067	-	(7,043,816)
2050	June 30, 2050	378,989,194	379,100,472	(111,278)	100%	13,320,098	20,375,186	-	13,320,098	20,375,186	-	(7,055,088)
2051	June 30, 2051	395,826,362	395,518,692	307,670	100%	13,962,109	21,249,435	-	14,062,869	21,249,435	-	(7,186,566)
2052	June 30, 2052	413,496,834	412,827,464	669,370	100%	14,658,802	22,540,313	-	14,847,060	22,540,313	-	(7,693,253)

Continued

Funding Schedule - Open Group (Continued)

Alternative funding schedule based on a discount rate of 6.00%

For the Fiscal Year	Measurement Date of	Total OPEB Liability	Fiduciary Net Position with an expected 6.00% return	Net OPEB Liability (Asset)	Funded Ratio	Service Cost	Employer Share of Benefit Payments (With Implicit Cost)	Trust Contributions Beyond Pay-as-you-go	Gross Trust Contributions	Benefit Payments Reimbursed from the Trust	Admin. & Investment Expenses Reimbursed from the Trust	Total Employer Payments Less Reimbursements
		I	II	[I - II]	[II / I]	V	VI	VII	[VI + VII]	IX	X	[VIII + IX + X]
2025	June 30, 2025	154,571,051	98,699,020	55,872,031	64%	5,244,673	7,035,676	1,105,630	8,141,306	7,035,676	-	1,105,630
2026	June 30, 2026	162,160,996	105,759,761	56,401,235	65%	5,380,023	7,945,563	594,667	8,540,230	7,945,563	-	594,667
2027	June 30, 2027	169,413,022	112,717,853	56,695,169	67%	5,516,964	8,558,791	544,338	9,103,129	8,558,791	-	544,338
2028	June 30, 2028	176,613,970	120,041,593	56,572,377	68%	5,690,720	9,278,761	424,369	9,703,130	9,278,761	-	424,369
2029	June 30, 2029	183,689,902	127,681,188	56,008,714	70%	5,848,409	9,853,143	489,534	10,342,677	9,853,143	-	489,534
2030	June 30, 2030	190,766,177	135,846,280	54,919,897	71%	6,046,204	10,465,808	558,570	11,024,378	10,465,808	-	558,570
2031	June 30, 2031	197,845,916	144,572,384	53,273,532	73%	6,253,009	11,349,254	401,757	11,751,011	11,349,254	-	401,757
2032	June 30, 2032	204,660,088	153,660,537	50,999,551	75%	6,462,601	11,780,219	745,319	12,525,538	11,780,219	-	745,319
2033	June 30, 2033	211,661,573	163,647,848	48,013,725	77%	6,703,601	12,171,984	1,179,131	13,351,115	12,171,984	-	1,179,131
2034	June 30, 2034	218,935,259	174,681,223	44,254,036	80%	6,945,154	12,808,173	1,422,933	14,231,106	12,808,173	-	1,422,933
2035	June 30, 2035	226,246,417	186,627,718	39,618,699	82%	7,218,793	13,527,561	1,641,538	15,169,099	13,527,561	-	1,641,538
2036	June 30, 2036	233,545,646	199,516,166	34,029,480	85%	7,521,580	13,823,281	2,345,636	16,168,917	13,823,281	-	2,345,636
2037	June 30, 2037	241,299,321	213,903,141	27,396,180	89%	7,825,950	14,170,084	3,064,550	17,234,634	14,170,084	-	3,064,550
2038	June 30, 2038	249,483,793	229,893,816	19,589,977	92%	8,167,407	14,669,075	3,701,519	18,370,594	14,669,075	-	3,701,519
2039	June 30, 2039	258,007,535	247,500,010	10,507,525	96%	8,513,426	15,231,835	4,349,592	19,581,427	15,231,835	-	4,349,592
2040	June 30, 2040	266,830,085	266,830,090	(5)	100%	8,894,930	15,598,296	-	8,894,930	15,598,296	-	(6,703,366)
2041	June 30, 2041	276,209,088	275,935,429	273,659	100%	9,304,212	16,372,441	-	9,481,208	16,372,441	-	(6,891,233)
2042	June 30, 2042	285,787,638	285,393,584	394,054	100%	9,740,869	17,138,698	-	10,106,128	17,138,698	-	(7,032,570)
2043	June 30, 2043	295,614,848	295,273,653	341,195	100%	10,188,475	17,122,667	-	10,772,238	17,122,667	-	(6,350,429)
2044	June 30, 2044	306,522,658	306,449,130	73,528	100%	10,657,788	17,759,089	-	11,482,252	17,759,089	-	(6,276,837)
2045	June 30, 2045	317,927,171	318,370,936	(443,765)	100%	11,157,010	18,413,486	-	11,157,010	18,413,486	-	(7,256,476)
2046	June 30, 2046	329,871,388	329,999,022	(127,634)	100%	11,682,601	18,206,487	-	11,682,601	18,206,487	-	(6,523,886)
2047	June 30, 2047	343,302,503	343,079,360	223,143	100%	12,240,632	18,454,902	-	12,452,618	18,454,902	-	(6,002,284)
2048	June 30, 2048	357,875,239	357,481,770	393,469	100%	12,813,982	19,149,875	-	13,273,389	19,149,875	-	(5,876,486)
2049	June 30, 2049	373,214,571	372,877,896	336,675	100%	13,430,162	19,753,067	-	14,148,257	19,753,067	-	(5,604,810)
2050	June 30, 2050	389,506,390	389,477,615	28,775	100%	14,075,465	20,375,186	-	15,080,790	20,375,186	-	(5,294,396)
2051	June 30, 2051	406,819,228	407,393,044	(573,816)	100%	14,753,550	21,249,435	-	14,753,550	21,249,435	-	(6,495,885)
2052	June 30, 2052	424,989,513	425,145,866	(156,353)	100%	15,489,350	22,540,313	-	15,489,350	22,540,313	-	(7,050,963)

Continued

Funding Schedule - Open Group (Continued)

Alternative funding schedule based on a discount rate of 6.10%

For the Fiscal Year	Measurement Date of	Total OPEB Liability I	Fiduciary Net Position with an expected 6.10% return II	Net OPEB Liability (Asset) [I - II]	Funded Ratio [II / I]	Service Cost V	Employer Share of Benefit Payments (With Implicit Cost) VI	Trust Contributions Beyond Pay-as-you-go VII	Gross Trust Contributions [VI + VII]	Benefit Payments Reimbursed from the Trust IX	Admin. & Investment Expenses Reimbursed from the Trust X	Total Employer Payments Less Reimbursements [VIII + IX + X]
2025	June 30, 2025	152,911,119	98,880,420	54,030,699	65%	5,134,072	7,035,676	1,105,630	8,141,306	7,035,676	-	1,105,630
2026	June 30, 2026	160,438,861	106,051,478	54,387,383	66%	5,265,995	7,945,563	594,667	8,540,230	7,945,563	-	594,667
2027	June 30, 2027	167,628,536	113,133,422	54,495,114	67%	5,399,451	8,558,791	509,568	9,068,359	8,558,791	-	509,568
2028	June 30, 2028	174,766,724	120,559,670	54,207,054	69%	5,568,999	9,278,761	350,386	9,629,147	9,278,761	-	350,386
2029	June 30, 2029	181,778,628	128,274,883	53,503,745	71%	5,722,703	9,853,143	371,471	10,224,614	9,853,143	-	371,471
2030	June 30, 2030	188,789,696	136,482,451	52,307,245	72%	5,915,693	10,465,808	391,097	10,856,905	10,465,808	-	391,097
2031	June 30, 2031	195,802,128	145,210,906	50,591,222	74%	6,117,569	11,349,254	179,043	11,528,297	11,349,254	-	179,043
2032	June 30, 2032	202,546,516	154,253,275	48,293,241	76%	6,322,117	11,780,219	460,989	12,241,208	11,780,219	-	460,989
2033	June 30, 2033	209,475,421	164,137,774	45,337,647	78%	6,557,455	12,171,984	826,221	12,998,205	12,171,984	-	826,221
2034	June 30, 2034	216,673,147	175,001,599	41,671,548	81%	6,793,387	12,808,173	993,842	13,802,015	12,808,173	-	993,842
2035	June 30, 2035	223,904,953	186,700,851	37,204,102	83%	7,060,772	13,527,561	1,127,972	14,655,533	13,527,561	-	1,127,972
2036	June 30, 2036	231,120,590	199,251,978	31,868,612	86%	7,356,782	13,823,281	1,738,551	15,561,832	13,823,281	-	1,738,551
2037	June 30, 2037	238,785,841	213,197,925	25,587,916	89%	7,654,356	14,170,084	2,354,093	16,524,177	14,170,084	-	2,354,093
2038	June 30, 2038	246,877,175	228,628,892	18,248,283	93%	7,988,263	14,669,075	2,876,959	17,546,034	14,669,075	-	2,876,959
2039	June 30, 2039	255,302,371	245,539,961	9,762,410	96%	8,326,638	15,231,835	3,399,247	18,631,082	15,231,835	-	3,399,247
2040	June 30, 2040	264,020,849	264,020,823	26	100%	8,699,794	15,598,296	4,184,934	19,783,230	15,598,296	-	4,184,934
2041	June 30, 2041	273,289,600	284,438,667	(11,149,067)	104%	9,100,172	16,372,441	-	9,100,172	16,372,441	-	(7,272,269)
2042	June 30, 2042	282,751,139	294,295,353	(11,544,214)	104%	9,527,354	17,138,698	-	9,527,354	17,138,698	-	(7,611,344)
2043	June 30, 2043	292,453,789	304,403,879	(11,950,090)	104%	9,965,243	17,122,667	-	9,965,243	17,122,667	-	(7,157,424)
2044	June 30, 2044	303,229,415	315,596,791	(12,367,376)	104%	10,424,409	17,759,089	-	10,424,409	17,759,089	-	(7,334,680)
2045	June 30, 2045	314,493,984	327,289,807	(12,795,823)	104%	10,912,781	18,413,486	-	10,912,781	18,413,486	-	(7,500,705)
2046	June 30, 2046	326,289,793	339,525,009	(13,235,216)	104%	11,426,903	18,206,487	-	11,426,903	18,206,487	-	(6,779,584)
2047	June 30, 2047	339,563,849	353,249,673	(13,685,824)	104%	11,972,755	18,454,902	-	11,972,755	18,454,902	-	(6,482,147)
2048	June 30, 2048	353,970,893	368,118,051	(14,147,158)	104%	12,533,645	19,149,875	-	12,533,645	19,149,875	-	(6,616,230)
2049	June 30, 2049	369,136,014	383,755,227	(14,619,213)	104%	13,136,374	19,753,067	-	13,136,374	19,753,067	-	(6,616,693)
2050	June 30, 2050	385,244,385	400,345,793	(15,101,408)	104%	13,767,634	20,375,186	-	13,767,634	20,375,186	-	(6,607,552)
2051	June 30, 2051	402,364,322	417,957,804	(15,593,482)	104%	14,431,016	21,249,435	-	14,431,016	21,249,435	-	(6,818,419)
2052	June 30, 2052	420,331,904	436,426,850	(16,094,946)	104%	15,150,877	22,540,313	-	15,150,877	22,540,313	-	(7,389,436)

Assumption Sensitivity

This section provides information about the sensitivity of the Total OPEB Liability to certain assumptions made in this actuarial valuation. The discount rate and benefit cost trend rate are the most significant assumptions used in this valuation. The table below shows the effect of increasing and decreasing those assumptions by 100 basis points above/below their projected levels in all future years.

Discount Rate Plus 1.00%

Current OPEB Liability, 06/30/2024	\$142,739,342
OPEB Liability - Discount Plus 1.00%	\$128,479,534
Decrease	\$14,259,808
Percent Decrease	9.99%

Discount Rate Minus 1.00%

Current OPEB Liability, 06/30/2024	\$142,739,342
OPEB Liability - Discount Minus 1.00%	\$159,567,221
Increase	\$16,827,879
Percent Increase	11.79%

Trend Plus 1.00%

Current OPEB Liability, 06/30/2024	\$142,739,342
OPEB Liability - Trend Plus 1.00%	\$164,420,135
Increase	\$21,680,793
Percent Increase	15.19%

Trend Minus 1.00%

Current OPEB Liability, 06/30/2024	\$142,739,342
OPEB Liability - Trend Minus 1.00%	\$125,030,352
Decrease	\$17,708,990
Percent Decrease	12.41%

Summary of Demographic Information

This section details the statistics related to the participants in the post-employment benefit plan. The census collection date is July 1, 2023.

The file that was used to prepare the GASB 75 valuation was provided by the Town. Our understanding is that this file represents the population of the Town's active and retired employees as of July 1, 2023, the census collection date.

CENSUS RECONCILIATION COMMENT: The census file contained 2,156 records. The GASB 75 valuation excluded 100 records because the employee may have been hired after the census collection date (July 1, 2023) or the records represented individuals that are not entitled to benefits. In addition to the reported census, there are 100 participants who have separated from service but have not yet started receiving benefits. It is anticipated that these former employees will never enroll for benefits and, as such, are excluded from the valuation.

All Active and Retired Employees:

	Actives	Inactive employees entitled to but not yet receiving benefits	Retirees and Surviving Spouses	Total
Male	465	35	265	765
Female	840	65	486	1,391
Total	1,305	100	751	2,156

Active Employees:

Age	Not Currently Eligible to Retire	Currently Eligible to Retire ¹	TOTAL
29 and Under	128	-	128
30 - 34	138	-	138
35 - 39	159	-	159
40 - 44	156	3	159
45 - 49	153	29	182
50 - 54	120	59	179
55 - 59	71	90	161
60 - 64	33	99	132
65 and Over	21	46	67
Total	979	326	1,305
Average Age		46.1	
Average Service		10.9	

Continued

¹ These active employees have met the minimum age and service requirements needed to vest in an OPEB benefit upon retirement.

Summary of Demographic Information (Continued)

Current Retirees:

Age	Retirees and Survivors	Spouses	TOTAL
54 and Under	4	1	5
55 - 59	13	-	13
60 - 64	52	3	55
65 - 69	94	14	108
70 - 74	140	4	144
75 - 79	148	3	151
80 and Over	272	3	275
Total	723	28	751

Average Age for Retired Employees: 74.9

Continued

Summary of Demographic Information (Continued)

Age	Years of Service								TOTAL
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 Plus	
<20	-	-	-	-	-	-	-	-	-
20 to 24	28	1	-	-	-	-	-	-	29
25 to 29	82	16	1	-	-	-	-	-	99
30 to 34	70	48	19	1	-	-	-	-	138
35 to 39	56	50	46	7	-	-	-	-	159
40 to 44	42	30	35	43	9	-	-	-	159
45 to 49	45	35	25	42	28	7	-	-	182
50 to 54	36	25	37	20	31	27	3	-	179
55 to 59	27	26	33	24	20	13	15	3	161
60 to 64	12	17	24	30	14	22	11	2	132
65 Plus	10	11	10	10	10	6	4	6	67
TOTAL	408	259	230	177	112	75	33	11	1,305

Average Age 46.1

Average Service 10.9

Actuarial Methods

Actuarial Cost Method

The Actuarial Cost Method used to determine the Total OPEB Liability, and the Annual Required Contribution is the Entry Age Normal (EAN) method as prescribed by GASB No. 75. This method is in the family of future benefit cost methods, which requires an estimate of the projected benefit payable at retirement to determine costs and liabilities.

The Normal Cost (or Service Cost) is the annual allocation required for each participant from entry date to the assumed retirement date so that the accumulated allocation at retirement is equal to the liability for the projected benefit. The projected benefits are based on estimates of future years of service and projected health benefit costs. The normal cost is developed as a level percent of compensation as prescribed by GASB No. 75.

The Present Value of Future Benefits is equal to the value of the projected benefit payable at retirement discounted back to the participant's current age. Discounts include such items as interest and mortality. The present value of future normal cost allocations is equal to the discounted value of the normal costs allocated from the member's current age to retirement age.

The difference between the Present Value of Future Benefits and the present value of future normal cost allocations represents the Total OPEB Liability at the participant's current age.

The Total OPEB Liability for participants currently receiving payments is calculated as the actuarial present value of future benefits expected to be paid. No normal cost is allocated for these participants.

Financial and Census Data

The Town provided the participant data, financial information and plan descriptions used in this valuation. The actuary has checked the data for reasonableness but has not independently audited the data. The actuary has no reason to believe the data is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

Plan Fiduciary Net Position

Market value of assets as of the measurement date is based on information provided by the town related to the MassPRIM funds held in trust.

Method Changes Since Last Year

None.

Assumptions and Methodology

Economic Assumptions

1. **DISCOUNT / FUNDING RATE:** An interest rate of 6.25% was used to calculate the net OPEB expense for the fiscal year ending June 30, 2024.
2. **PAYROLL GROWTH:** 3.50% per year.
3. **PRE 65 MEDICAL TREND:** Health care costs were modeled in accordance with the Society of Actuaries Getzen Model of Long-Run Medical Cost Trends as updated through October 2023 for 2024 thru 2090 + .

The long-term trend rates were based on the following assumptions:

- Rate of Inflation:.....3.10%
- Rate of Growth in Real Income / GDP per capita:1.40%
- Income Multiplier for Health Spending:0.90%
- Health Share of GDP Resistance Point:25.00%
- Year after which medical costs are limited to rate of growth in GDP2090

The SOA Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical US medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of an SOA Project Oversight Group. The above schedule represents a reasonable medical trend projection for the current plan provisions and demographics of the Retiree Welfare Benefits Plan, and no changes to these baseline assumptions are necessary.

Period	Trend Rate	Period	Trend Rate
2024	7.50%	2070	5.21%
2025	7.00%	2071	5.20%
2026	6.50%	2072	5.19%
2027	6.00%	2073	5.18%
2028	5.91%	2074	5.17%
2029	5.83%	2075	5.16%
2030	5.74%	2076	5.15%
2031	5.66%	2077	5.14%
2032	5.57%	2078	5.13%
2033 to 2058	5.48%	2079	5.13%
2059	5.46%	2080	5.12%
2060	5.39%	2081	5.05%
2061	5.36%	2082	4.99%
2062	5.33%	2083	4.93%
2063	5.31%	2084	4.87%
2064	5.29%	2085	4.82%
2065	5.28%	2086	4.76%
2066	5.26%	2087	4.71%
2067	5.25%	2088	4.65%
2068	5.23%	2089	4.60%
2069	5.22%	2090 +	4.54%

4. **POST 65 MEDICAL TREND:** It was assumed that post 65 medical premiums will increase by 4.54% for years 2024 and beyond.

Continued

Assumptions and Methodology (Continued)

Demographic Assumptions

5. **CENSUS COLLECTION DATE:** The census used in this report represents the eligible population as of July 1, 2023. The valuation date is July 1, 2023 and the measurement date is June 30, 2024.
6. **CENSUS COMMENT:** In addition to the reported census, there are 100 participants who have separated from service but have not yet started receiving benefits. It is anticipated that these former employees will never enroll for benefits and, as such, are excluded from the valuation.
7. **CENSUS COMMENT:** In addition to the reported census, there are 100 participants who have separated from service but have not yet started receiving benefits. It is anticipated that these former employees will never enroll for benefits and, as such, are excluded from the valuation.
8. **RETIREMENT RATES:** The following are representative assumed retirement rates for eligible employees are taken from the Needham Contributory Actuarial Valuation Retirement System as of January 1, 2023.

Group 1			Group 4	
Age	Male	Female	Age	Rate
45	0.00%	0.00%	45	1.00%
50	1.00%	1.50%	50	2.00%
55	2.00%	5.50%	55	15.00%
60	12.00%	5.00%	60	20.00%
65	40.00%	15.00%	65	100.00%
>=70	100.00%	100.00%	>=70	100.00%

9. **WITHDRAWAL RATES:** These rates represent the percentage of employees who will terminate employment at the given service interval each year, for reasons other than death, or retirement are taken from the Needham Contributory Actuarial Valuation Retirement System as of January 1, 2023.

Group 1		Group 4	
Service	Rate	Service	Rate
0	15.00%	0	1.50%
1	13.52%	1	1.50%
5	7.60%	5	1.50%
10	5.40%	10	1.50%
15	3.30%	15	1.13%
20	2.00%	20	0.75%
25	1.00%	25	0.38%
>=30	0.00%	>=30	0.00%

10. **PERMANENT DISABILITY RATES:** These rates represent the percentage of employees who will become disabled at the given age each year, for reasons other than death, or retirement are taken from the Needham Contributory Actuarial Valuation Retirement System as of January 1, 2023.

Attained Age	Police and Fire	All Others
20	0.0010	0.0001
30	0.0030	0.0003
40	0.0030	0.0010
50	0.0125	0.0019
60	0.0085	0.0028

11. **MORTALITY:** SOA RP-2014 White Collar Mortality with Scale MP-2016, SOA RP-2014 Blue Collar Mortality with Scale MP-2016, set forward 1 year for females, and SOA RP-2014 Disabled Retiree Mortality with Scale MP-2016.

Continued

Assumptions and Methodology (Continued)

12. **NEW ENTRANTS (PROJECTION ONLY):** This report includes funding projections that assume that employees that leave the town will be replaced according to the table below. 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 to maintain a stable demographic in all future years.

New Entrant Assumption - derived from participants with less than 3 years of service

% of Total	Town		School		Police		Fire		Sewer		Water		All Entities		
Age	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
20-29	2.00%	2.00%	5.00%	20.67%	1.33%	0.33%	0.67%	0.33%	0.00%	0.00%	0.33%	0.00%	9.33%	23.33%	32.67%
30-39	1.67%	4.00%	5.00%	15.00%	0.67%	0.00%	1.00%	0.00%	0.33%	0.00%	0.00%	0.00%	8.67%	19.00%	27.67%
40-49	2.67%	2.67%	2.00%	11.67%	0.00%	0.00%	0.67%	0.00%	0.67%	0.00%	0.33%	0.00%	6.33%	14.33%	20.67%
50-59	3.33%	2.00%	1.33%	8.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.67%	10.67%	15.33%
60+	0.67%	0.67%	1.00%	1.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.67%	2.00%	3.67%
Totals		21.67%		71.67%		2.33%		2.67%		1.00%		0.67%		100.00%	100.00%

Benefit Assumptions

13. **PARTICIPATION RATE:** It was assumed 80% of future retirees eligible for coverage will elect coverage.
14. **PERCENT MARRIED:** It was assumed that 80% of future male retirees and 70% of future female retirees will be married, with spouses who will also elect coverage, with male spouses assumed to be 3 years older than female spouses. For current retirees, actual census information was used.
15. **PER CAPITA COSTS:** The following rates were used in the development of per capita costs for future retirees. Current retirees are valued based on coverage and plan elected.

Plan Description	July 1, 2023		July 1, 2024	
	Single	Two Person	Single	Two Person
Harvard Pilgrim Benchmark Pre 65	\$14,628.00	\$38,124.00	\$16,428.00	\$42,828.00
Tufts Medicare Supplement PDP Plus Post 65	\$4,644.00	\$9,288.00	\$5,244.00	\$10,488.00

16. **PER CAPITA COST ASSUMED FOR RETIREES BY PLAN AS PROVIDED BY THE TOWN:**

Plan	Assumed Premium			
	Single		Two or More	
	Pre 65	Post 65	Pre 65	Post 65
BCBC Medex Enhanced	\$14,628.00	\$4,860.00	\$38,124.00	\$9,720.00
HPHC EPO Bench	\$14,628.00	\$4,812.00	\$38,124.00	\$9,624.00
HPHC EPO HDHP	\$11,328.00	\$4,812.00	\$29,556.00	\$9,624.00
HPHC Medicare	\$11,328.00	\$4,812.00	\$29,556.00	\$9,624.00
Manages Blue for Seniors	\$11,328.00	\$4,644.00	\$29,556.00	\$9,288.00
NWB Bench	\$14,628.00	\$4,644.00	\$38,124.00	\$9,288.00
NWB HDHP	\$11,328.00	\$4,644.00	\$29,556.00	\$9,288.00
TMP HMO	\$15,480.00	\$4,644.00	\$40,524.00	\$9,288.00
Tufts Medicare Supp	\$15,480.00	\$4,644.00	\$40,524.00	\$9,288.00

Continued

Assumptions and Methodology (Continued)

17. **IMPLICIT SUBSIDY:** GASB No. 75 requires that employers recognize the expected claims of the retiree population less the expected contributions by those retirees. This is not necessarily the same determination as the expected cash payments of the employer for retiree health benefits. The difference is that many post-employment health plans (including the Town's program) charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

The following age-based factors were used to adjust for the implicit subsidy and are based on an average age of 47 calculated as of July 1, 2023. These inputs are from the Society of Actuaries' June 2013 research report "Health Care Costs - From Birth to Death" by Dale Yamamoto (<https://www.soa.org/research-reports/2013/research-health-care-birth-death/>)

Age	Annual Increase Factor	Age Adjusted Claim Factor
40	1.88%	0.8579
45	3.05%	0.9417
50	4.31%	1.0943
55	4.05%	1.3514
60	4.28%	1.6481

See example of how this implicit subsidy is applied on page 27.

Other Assumptions

18. **ASSETS VALUATION METHOD:** Market Value as of measurement date
19. **ADMINISTRATIVE EXPENSES:** Included in the premiums used.
20. **CENSUS DATA MANIPULATION AND OTHER MATTERS:** Certain information requested from the town was not available. This is a summary of the missing information and the actions taken to address this in the valuation:
- Spouse Date of Birth: For this missing data, it was assumed that female spouses are three years younger than male spouses.
 - Life insurance: This report does not value life insurance due to limited information and small number of retirees covered.
 - Duplicate records in the census were valued once with the additional records being omitted.
 - There is a significant decrease in the census from the prior valuation which has not been explained.
 - Allocations were made in some cases to assigned amounts to the various funds / components that the town breaks out in this report. When an allocation is made it is based on the fund / components total OPEB Liability in relation the total OPEB Liability.

Calculation of Per Capita Costs

This is an example for: a female employee assumed to be age 60 with a spouse assumed to be age 63 with a contribution rate of 32.00%

	Retiree		Spouse	
	Pre 65	Post 65	Pre 65	Post 65
1. Medical Premium (Harvard Pilgrim / Tufts Medicare)	\$14,628.00	\$4,644.00	\$38,124.00	\$9,288.00
2. Less Individual Premium	-	-	\$14,628.00	\$4,644.00
3. Adjusted cost for Medical Premium (1 - 2)	\$14,628.00	\$4,644.00	\$23,496.00	\$4,644.00
4. Age adjustment factor	1.64810	1.00	1.86890	1.00
5. Age Adjusted Medical (3 * 4)	\$24,108.44	\$4,644.00	\$43,911.79	\$4,644.00
6. Contribution Percentage	32.00%	50.00%	32.00%	50.00%
7. Retiree Contribution (3 * 6)	\$4,680.96	\$2,322.00	\$7,518.72	\$2,322.00
Net Cost to Town (5 - 7)	\$19,427.48	\$2,322.00	\$36,393.07	\$2,322.00

Glossary

Brief explanations of terms used in this report:

Annual OPEB Expense

The amount recognized by an employer in each accounting period for contributions to a defined benefit OPEB plan on the modified accrual basis of accounting.

Collective deferred outflows of resources and deferred inflows of resources related to OPEB

Deferred outflows of resources and deferred inflows of resources related to OPEB arising from certain changes in the collective net OPEB liability or collective total OPEB liability.

Covered Payroll

Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate.

Net OPEB liability (NOL)

The liability in *excess of the Fiduciary Net Position* of employers and nonemployer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a trust that meets the criteria of the GASB Statements.

Normal Cost or Service Cost

The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used interchangeably. Service cost appears as a component of the annual OPEB costs.

Other Postemployment Benefits (OPEB)

Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).

Plan Fiduciary Net Position (FNP)

Set equal to the market value of assets as of the measurement date.

Present Value of Future Benefits (PVFB)

The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability.

Total OPEB liability (TOL)

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service in conformity with the GASB Statements. The TOL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria of the GASB Statements.

Suggested Footnotes for OPEB

GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (OPEB), replaces the requirements of Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. This applies if a trust fund has been established to fund future OPEB costs. In prior years the Town established a single employer defined benefit OPEB Trust Fund to provide funding for future employee health care costs. The OPEB Trust Fund does not issue a stand-alone financial report.

GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. This statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. This statement identifies the methods and assumptions that are required to be used to project benefit payments, discounted projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service.

All the following OPEB disclosures are based on a measurement date of June 30, 2024.

Plan description:

The Town provides post-employment healthcare benefits for retired employees through the Town's plan. The Town provides health insurance coverage through a variety of health plans through the West Suburban Health Group, a municipal joint purchase group organized under Massachusetts General Laws Chapter 32B §12. The benefits, benefit levels, employee contributions, and employer contributions are governed by Chapter 32 of Massachusetts General Laws.

Benefits Provided:

The Town provides medical and prescription drug insurance to retirees and their covered dependents. All active employees who retire from the Town and meet the eligibility criteria will receive these benefits.

Funding Policy:

The Town's funding policy includes funding the OPEB fund on a pay-as-you-go basis and making additional contributions based on actuarially determined amounts or annual budget limitations/authorizations.

Employees covered by benefit terms:

As of July 1, 2023, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	751
Inactive employees entitled to but not yet receiving benefit payments	100
Active Employees	1,305
Total Participants covered by OPEB Plan	<u>2,156</u>

Total OPEB Liability:

The Town's total OPEB liability of \$142,739,342 was measured as of June 30, 2024, and was determined by an actuarial valuation as of July 1, 2023.

Continued

Suggested Footnotes for OPEB (Continued)

Investments:

The OPEB trust fund assets are invested with the Commonwealth's State Retirees Benefit Trust Fund.

Rate of Return:

For the year ended June 30, 2024, the annual money-weighted rate of return on investments, net of investment expense, was 9.22%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Actuarial assumptions and other inputs:

The total OPEB liability in the July 1, 2023 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Discount Rate	6.25%
Healthcare Trend Rates:	
2023 Trend (Pre 65 / Post 65)	12.31% / 12.92%
2024 Trend (Pre 65 / Post 65)	7.50% / 4.54%
Ultimate Trend	4.54%
Year Ultimate Trend is Reached (Pre 65 / Post 65)	2090 / 2024
Salary Increases	3.50%

Mortality rates: SOA RP-2014 White Collar Mortality with Scale MP-2016, SOA RP-2014 Blue Collar Mortality with Scale MP-2016, set forward 1 year for females, and SOA RP-2014 Disabled Retiree Mortality with Scale MP-2016.

Target Allocations:

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the target asset allocation as of June 30, 2024, are summarized in the following table:

Asset Allocation:	Target Allocation	Long Term Expected Real Rate of Return*
Global Equity	36.00%	7.25%
Core Fixed Income	15.00%	4.88%
Value Added Fixed Income	9.00%	5.16%
Private Equity	16.00%	9.71%
Real Estate	10.00%	6.17%
Timberland	4.00%	4.95%
Portfolio Completion Strategies	10.00%	6.17%
Overlay	0.00%	0.00%
Total Core	100.00%	

* Mean Geometric Returns based on 2024 Horizon Survey of Capital Market Assumptions.

Continued

Suggested Footnotes for OPEB (Continued)

Contributions:

In addition to the implicit subsidy contribution, the Town's policy is to contribute the actuarially determined contribution.

Discount Rate:

The discount rate used to measure the net OPEB liability was 6.25%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate.

Based on those assumptions, the OPEB plan fiduciary net position was projected to be available to make all projected future benefit payments of current plan members.

Significant Changes from the Previous Actuarial Valuation:

- Initial trend rates were advanced, the model for trends in subsequent years is based on the Getzen Model as updated through October 2023.
- Retirement and withdrawal rates are based on the Needham Contributory Actuarial Valuation Retirement System as of January 1, 2023.

Changes in the Total Net OPEB Liability:

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (Asset) (c) = (a) - (b)
Balance at 06/30/2023	\$ 143,077,747	\$ 70,134,455	\$ 72,943,292
Changes Recognized for the Measurement Period:			
Service Cost	4,728,355	-	4,728,355
Interest on Total OPEB Liability at 6.25%	8,541,761	-	8,541,761
Changes of Assumptions	(2,133,412)	-	(2,133,412)
Difference Between Actual vs. Expected Experience	(6,533,926)	-	(6,533,926)
Contributions		9,175,964	(9,175,964)
Net Investment Income	-	7,801,715	(7,801,715)
Benefit Payments	(4,941,183)	(4,941,183)	-
Administrative Expense	-	-	-
Net Changes	\$ (338,405)	\$ 12,036,496	\$ (12,374,901)
Balance at 06/30/2024	\$ 142,739,342	\$ 82,170,951	\$ 60,568,391

Continued

Suggested Footnotes for OPEB (Continued)

Sensitivity of the total OPEB liability to changes in the discount rate:

The following presents the total OPEB Liability, calculated using the discount rate of 6.25%, as well as what the total OPEB Liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

Total OPEB Liability	Discount Rate		
	1% Decrease	Baseline	1% Increase
June 30, 2024	\$159,567,221	\$142,739,342	\$128,479,534

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates:

The following presents the total OPEB Liability, calculated using the trend rate starting at 12.31%, as well as what the total OPEB Liability would be if it were calculated using a trend rate that is one percentage point lower or one percentage point higher than the current rate:

Total OPEB Liability	Healthcare Cost Trend Rates		
	1% Decrease	Baseline	1% Increase
June 30, 2024	\$125,030,352	\$142,739,342	\$164,420,135

OPEB Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2024, the Town recognized OPEB expense of \$9,279,773.

At June 30, 2024, the Town reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflow	Deferred Inflow	Net
Differences between expected & actual experience	-	(\$8,623,359)	(\$8,623,359)
Changes in assumptions	\$6,384,178	(\$1,822,872)	\$4,561,306
Investments	\$2,853,214	(\$5,153,537)	(\$2,300,323)
	<u>\$9,237,392</u>	<u>(\$15,599,768)</u>	<u>(\$6,362,376)</u>

Amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPI

06/30/2025	(\$1,518,493)
06/30/2026	\$260,751
06/30/2027	(\$1,233,118)
06/30/2028	(\$1,665,019)
06/30/2029	(\$1,108,885)
There After	<u>(\$1,097,612)</u>
	<u>(\$6,362,376)</u>

Schedules of Required Supplementary Information

Schedule of Changes In the Net OPEB Liability

Service cost	\$	4,728,355
Interest		8,541,761
Plan amendments		-
Differences between expected and actual experience		(6,533,926)
Changes of assumptions		(2,133,412)
Benefit payments including implicit subsidy		(4,941,183)
Net Change in Total OPEB Liability	\$	(338,405)
Total OPEB Liability - Beginning		143,077,747
Total OPEB Liability - Ending (a)		142,739,342

Plan Fiduciary Net Position

Contributions - employer		9,175,964
Net investment income		7,801,715
Benefit payments, including refunds of member contributions		(4,941,183)
Other		-
Net Change in Plan Fiduciary Net Position	\$	12,036,496
Plan Fiduciary Net Position - Beginning		70,134,455
Plan Fiduciary Net Position - Ending (b)	\$	82,170,951
Net OPEB Liability - Ending (a-b)	\$	60,568,391