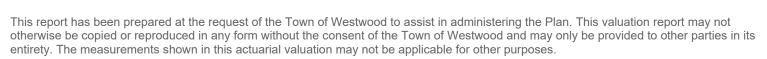
Town of Westwood

Actuarial Valuation and Review of Other Postemployment Benefits (OPEB)

Measured at June 30, 2021



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May 27, 2022

Ms. Pamela Dukeman Finance Director Town of Westwood 580 High Street Westwood, MA 02090

Dear Ms. Dukeman:

We are pleased to submit this report on our actuarial valuation of postemployment welfare benefits as of June 30, 2021. The purpose of this report is to calculate an Actuarially Determined Contribution for the Town of Westwood Other Postemployment Benefit (OPEB) Plan for the fiscal years ending June 30, 2022 and June 30, 2023. It summarizes the actuarial data used in the valuation and analyzes the experience and changes in assumptions since the prior valuation. The GASB Statements No. 74 and 75 disclosure information for the fiscal year ending June 30, 2022 will be provided in a separate report when the June 30, 2022 financial information is available.

This report is based on information received from the Town of Westwood and vendors employed by the Town of Westwood. Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience or rates of return on assets differing from that anticipated by the assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.

The actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. The actuarial calculations were directed under our supervision. We are members of the American Academy of Actuaries and collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Town of Westwood are reasonably related to the experience of and the expectations for the Plan.

We look forward to discussing this with you at your convience. Once you've reviewed the report, please send a copy (preferably the electronic version) to Jim Lamenzo at PERAC. His email address is jlamenzo@per.state.ma.us.

We look forward to discussing this with you at your convenience.

Sincerely, Segal

Kathleen A. Riley, FSA, MAAA, EA

Senior Vice President and Actuary

Daniel J. Rhodes, FSA, MAAA

Vice President and Consulting Actuary



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Purpose and basis

This report presents the results of our actuarial valuation of the Town of Westwood other postemployment welfare benefit plan as of June 30, 2021. The purpose of this report is to calculate a recommended Actuarially Determined Contribution for the OPEB plan for the fiscal years ending June 30, 2022 and June 30, 2023. Determinations for purposes other than meeting funding requirements may be significantly different from the results reported here. This valuation is based on:

- The benefit provisions of the OPEB plan, as administered by the Town of Westwood;
- The characteristics of covered active members, retired members and beneficiaries as of June 30, 2021, provided by the Town of Westwood;
- The assets of the Plan as of June 30, 2021, provided by the Town of Westwood;
- Economic assumptions regarding future salary increases and investment earnings;
- Health care assumptions regarding per capita costs, trend rates and participation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Highlights of the valuation

- The discount rate used to determine the liabilities that are the basis of the Actuarially Determined Contribution is the expected return on assets. Based on the investment allocation of the OPEB Trust, the Town has selected an expected return on assets of 6.50%. This is a decrease from the 7.00% assumption selected with the prior valuation.
- The unfunded actuarial accrued liability (UAAL) as of June 30, 2021 is \$19,835,600 based on an actuarial accrued liability (AAL) of \$35,287,774 and an actuarial value of assets of \$15,452,174. Going forward, net unfunded plan obligations will be expected to change due to normal plan operations, which consist of continuing accruals for active members, plus interest on the unfunded actuarial accrued liability, less employer contributions. Future valuations will analyze the difference between actual and expected unfunded actuarial accrued liabilities.
- As of June 30, 2021, the ratio of assets to the AAL (the funded ratio) is 43.8%, compared to 19.7% in the prior valuation. This funded percentage is not necessarily appropriate for assessing the sufficiency of OPEB assets to cover the estimated cost of settling the benefit obligations or the need for or the amount of future contributions.

- In addition to the lowering the discount rate from 7.00% to 6.50%, the following assumptions were revised with this valuation:
 - The per capita health costs and contributions were updated to reflect current premiums and the most recent Commonwealth OPEB valuation report.
 - The trend assumptions were revised, per the most recent Commonwealth OPEB valuation report.
 - The mortality projection scale for non-teachers and the mortality assumption for teachers were updated.
 - The retirement assumption for Group 1 and Group 4 employees hired on or after April 2, 2012 was updated.
 - The Medicare enrollment assumption for future retirees hired prior to 1986 and current retirees under age 65 was updated.
- The UAAL was expected to increase by \$1,094,186 from \$36,106,033 as of June 30, 2019 to \$37,200,219 as of June 30, 2021. The actual unfunded liability of \$19,835,600 is \$17,364,619 less than expected. The sources of the net experience gain are shown below:

June 30, 2019 unfunded actuarial accrued liability	\$36,106,033
June 30, 2021 expected unfunded actuarial accrued liability	\$37,200,219
Change due to:	
Experience gain	-\$3,563,738
Investment gain	-2,177,606
Updating future trends	-324,355
Updating per capita costs and contributions	-11,471,779
Updating the mortality and retirement assumptions	60,741
Updating Medicare enrollment assumption	-1,812,365
Lowering the discount rate	<u>1,924,483</u>
Net gain	-\$17,364,619
June 30, 2021 unfunded actuarial accrued liability	\$19,835,600

- The participant data received for the June 30, 2021 actuarial valuation included 434 active employees with health coverage and 383 retirees and beneficiaries receiving retiree health benefits compared to 415 active employees and 419 retirees and beneficiaries in the prior valuation.
- The Actuarially Determined Contribution (ADC) for fiscal year 2022 is \$2,621,862. The ADC is calculated using a 24-year amortization of the UAAL, with payments increasing at 3% per year.

- A summary of the valuation results appears on page 12 with a summary of results by department on page 13.
- A projection of the ADC appears on page 14. The projection reflects the Town of Westwood's policy to contribute \$1,490,000 in fiscal 2022, increasing \$25,000 per year thereafter. The liabilities are projected to be fully funded in 2034, if all assumptions are met and there are no future changes in assumption or the plan benefits. This is seven years earlier than in the prior valuation.
- The long-term impact of the Coronavirus (COVID-19) pandemic is still unknown. Our results do not include the impact of the following:
 - The short-term impact on health plan costs;
 - Short-term or long-term impacts on mortality of the covered population; or
 - The potential for federal or state fiscal relief.

OPEB Trust information

As of June 30, 2021, the Town of Westwood had \$15,452,174 in assets. The table below shows the increase in assets from June 30, 2019 to June 30, 2021.

Reconciliation of OPEB Balance from June 30, 2019 through June 30, 2021	Total
Balance as of June 30, 2019	\$8,878,805
Contributions	1,440,000
Net investment income	200,978
Balance as of June 30, 2020	\$10,519,783
Contributions	1,465,000
Net investment income	3,467,391
Balance as of June 30, 2021	\$15,452,174

Other considerations

Employer decisions regarding plan design, cost sharing between the Employer and its retirees, actuarial cost method, amortization techniques, and integration with Medicare are just some of the decisions that affect the magnitude of OPEB obligations. We are available to assist you with any investigation of such options you may wish to undertake.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits does not incorporate the potential effect of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short-term volatility in accrued liabilities and the actuarial value of assets, if any.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to defining future uncertain obligations of a postretirement health plan. As such, it will never forecast the precise future stream of benefit payments. It is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan of benefits

Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may provide health benefits to post-65 retirees that coordinates with Medicare. If so, changes in the Medicare law or administration may change the plan's costs without any change in the terms of the plan itself. It is important for the Town of Westwood to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.

Participant data

An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a "perfect" result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.

Assets

The valuation is based on the asset values as of the valuation date, provided by the Town of Westwood.

Actuarial assumptions

In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premiums, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This forecast also requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan's benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets or, if there are no assets, a rate of return based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model necessarily uses approximations and estimates that may lead to significant changes in our results but will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The actuarial valuation is prepared for use by the Town of Westwood. It includes information for compliance with accounting standards and for the plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.

If the Town of Westwood is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.

An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

Sections of this report include actuarial results that are not rounded, but that does not imply precision.

Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in plan enrollment, emerging claims experience, health care cost trend, and investment losses, not just the current valuation results.

Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Town of Westwood should look to their other advisors for expertise in these areas.

While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

Segal's report shall be deemed to be final and accepted by the Town of Westwood upon delivery and review. The Town of Westwood should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Section 2: Valuation Results

Summary of valuation results

June 30, 2021 6.50% Discount Rate	June 30, 2019 7.00% Discount Rate
\$16,448,294	\$21,884,964
<u>18,839,480</u>	23,099,874
\$35,287,774	\$44,984,838
<u>15,452,174</u>	<u>8,878,805</u>
\$19,835,600	\$36,106,033
43.8%	19.7%
June 30, 2022	June 30, 2020
\$1,402,186	\$1,508,715
<u>1,219,676</u>	<u>2,220,970</u>
\$2,621,862	\$3,729,685
1,620,277	1,912,326
June 30, 2023	June 30, 2021
\$1,446,418	\$1,556,307
<u>1,224,393</u>	<u>2,311,930</u>
\$2,670,811	\$3,868,237
1,740,670	2,110,784
	\$16,448,294 18,839,480 \$35,287,774 15,452,174 \$19,835,600 43.8% June 30, 2022 \$1,402,186 1,219,676 \$2,621,862 1,620,277 June 30, 2023 \$1,446,418 1,224,393 \$2,670,811

Notes:

Assumes payment at the middle of fiscal year.

Amortization payments for fiscal 2020 and fiscal 2021 are 26-year and 25-year payments, respectively, increasing 3.0% per year.

Amortization payments for fiscal 2022 and fiscal 2023 are 24-year and 23-year payments, respectively, increasing 3.0% per year.

Section 2: Valuation Results

Department results - 6.50% discount rate

	General Government	School	Public Safety	DPW	Total
Actuarial Accrued Liability					
Current retirees, beneficiaries, and dependents	\$1,142,594	\$10,460,499	\$3,995,525	\$849,676	\$16,448,294
2. Current active employees	<u>1,308,699</u>	11,981,203	4,576,379	<u>973,199</u>	18,839,480
3. Total: (1) + (2)	\$2,451,293	\$22,441,702	\$8,571,904	\$1,822,875	\$35,287,774
4. Actuarial value of assets as of June 30, 2021	<u>1,073,398</u>	9,827,003	3,753,554	<u>798,219</u>	<u>15,452,174</u>
5. Unfunded actuarial accrued liability (UAAL) as of June 30, 2021: (3) - (4)	\$1,377,895	\$12,614,699	\$4,818,350	\$1,024,656	\$19,835,600
6. Funded ratio: (4) / (3)	43.8%	43.8%	43.8%	43.8%	43.8%
Actuarially Determined Contribution for Fiscal Year Ending June 30, 2022:					
7. Normal cost, including adjustment for timing	\$94,097	\$820,807	\$437,088	\$50,194	\$1,402,186
8. Amortization payment, including adjustment for timing	<u>84,726</u>	<u>775,668</u>	<u>296,277</u>	<u>63,005</u>	<u>1,219,676</u>
9. Total Actuarially Determined Contribution (ADC): (7) + (8)	\$178,823	\$1,596,475	\$733,365	\$113,199	\$2,621,862
10. Projected benefit payments	119,425	1,027,473	386,135	87,244	1,620,277
Actuarially Determined Contribution for Fiscal Year Ending June 30, 2023:					
11. Normal cost, including adjustment for timing	\$97,065	\$846,699	\$450,876	\$51,777	\$1,446,418
12. Amortization payment, including adjustment for timing	<u>85,054</u>	<u>778,668</u>	<u>297,423</u>	63,249	1,224,393
13. Total Actuarially Determined Contribution (ADC): (11) + (12)	\$182,119	\$1,625,367	\$748,299	\$115,026	\$2,670,811
14. Projected benefit payments	138,860	1,091,432	410,219	100,158	1,740,670
Notes:					

Notes:

Assumes payment at the middle of fiscal year.

Amortization payments for fiscal 2022 and fiscal 2023 are 24-year and 23-year payments, respectively, increasing 3.0% per year.

Retiree liabilities and projected benefit payments are estimated based on distribution of active liabilities in these subgroups.

Assets as of June 30, 2021 are allocated in proportion to liabilities.

Section 2: Valuation Results

Projection of actuarially determined contribution

6.50% Discount Rate, 24-Year Closed Amortization with Funding Policy Contributions

				(3)	(4)	(5)					
	Fiscal Year	(1)	(2)	Actuarially Determined	Projected Benefits to	Projected Benefits to	(6) Contribution	(7) Total Town	(8)	(9)	(10) UAAL at
	Ending	Normal	(2) Amortization	Contribution	be Paid by	be Paid by	to OPEB	Cost	Assets at	AAL at	End of Year
	June 30	Cost	of UAAL	(1) + (2)	Town	OPEB Trust	Trust	(4) + (6)	End of Year	End of Year	(9) - (8)
	2022	\$1,402,186	\$1,219,676	\$2,621,862	\$1,620,277	\$0	\$1,490,000	\$3,110,277	\$17,994,228	\$37,356,412	\$19,362,184
	2023	1,446,418	1,224,393	2,670,811	1,740,670	0	1,515,000	3,255,670	20,727,315	39,480,914	18,753,599
	2024	1,492,045	1,221,802	2,713,847	1,845,630	0	1,540,000	3,385,630	23,663,853	41,682,278	18,018,425
	2025	1,539,112	1,211,830	2,750,942	1,991,016	0	1,565,000	3,556,016	26,817,065	43,925,266	17,108,201
	2026	1,587,663	1,190,377	2,778,040	2,114,881	0	1,590,000	3,704,881	30,201,036	46,236,325	16,035,289
	2027	1,637,746	1,157,070	2,794,816	2,300,335	0	1,615,000	3,915,335	33,830,765	48,557,902	14,727,137
	2028	1,689,409	1,105,017	2,794,426	2,490,542	0	1,640,000	4,130,542	37,722,226	50,887,406	13,165,180
	2029	1,742,701	1,030,263	2,772,964	2,640,695	0	1,665,000	4,305,695	41,892,431	53,268,368	11,375,937
	2030	1,797,675	931,632	2,729,307	2,795,364	0	1,690,000	4,485,364	46,359,499	55,701,208	9,341,709
	2031	1,854,383	803,674	2,658,057	3,041,647	0	1,715,000	4,756,647	51,142,726	58,096,544	6,953,818
	2032	1,912,880	631,201	2,544,081	3,091,006	0	1,740,000	4,831,006	56,262,663	60,657,007	4,394,344
	2033	1,973,222	422,971	2,396,193	3,245,556	0	1,765,000	5,010,556	61,741,196	63,286,678	1,545,482
	2034	2,035,467	158,668	2,194,135	0	3,407,834	3,630,386	3,630,386	65,984,045	65,984,045	0
	2035	2,099,676	0	2,099,676	0	3,578,226	2,099,676	2,099,676	68,747,162	68,747,162	0
	2036	2,165,910	0	2,165,910	0	3,757,137	2,165,910	2,165,910	71,573,600	71,573,600	0
	2037	2,234,234	0	2,234,234	0	3,944,994	2,234,234	2,234,234	74,460,400	74,460,400	0
	2038	2,304,713	0	2,304,713	0	4,142,244	2,304,713	2,304,713	77,404,016	77,404,016	0
	2039	2,377,415	0	2,377,415	0	4,349,356	2,377,415	2,377,415	80,400,257	80,400,257	0
	2040	2,452,411	0	2,452,411	0	4,566,824	2,452,411	2,452,411	83,444,224	83,444,224	0
_	2041	2,529,772	0	2,529,772	0	4,795,165	2,529,772	2,529,772	86,530,240	86,530,240	0
	2042	2,609,574	0	2,609,574	0	5,034,923	2,609,574	2,609,574	89,651,774	89,651,774	0
	2043	2,691,893	0	2,691,893	0	5,286,669	2,691,893	2,691,893	92,801,360	92,801,360	0
	2044	2,776,809	0	2,776,809	0	5,551,003	2,776,809	2,776,809	95,970,513	95,970,513	0
_	2045	2,864,403	0	2,864,403	0	5,828,553	2,864,403	2,864,403	99,149,628	99,149,628	0

Notes:

Contributions are assumed to be made in the middle of the fiscal year.

Normal cost is projected to increase 3.0% per year for inflation and 0.15% per year for mortality improvement and does not reflect the future impact of pension reform for new hires.

Amortization payments calculated to increase 3.0% per year.



Exhibit I: Summary of Participant Data

	June 30, 2021	June 30, 2019
Active employees covered for medical benefits		
Number of employees		
- Male	168	154
- Female	<u>266</u>	<u>261</u>
- Total	434	415
Average age	45.6	46.0
Average service	11.1	11.6
Retired employees, spouses and beneficiaries covered for medical benefits		
Number of individuals	383	419
Average age	74.0	73.6

Exhibit II: Statement of Actuarial Assumption, Methods and Models

Data:	Detailed census data, premium rates and summary plan descriptions for postemployment welfare benefits were provided by the Town of Westwood.
Actuarial Cost Method:	Entry Age Normal – Level percentage of payroll
Per Capita Cost Development:	Per capita costs were taken from the June 30, 2021 Commonwealth of Massachusetts Postemployment Benefit Plans Other than Pensions GASB Statement No. 74 Valuation Report, dated January 2022, completed by Deloitte Consulting. Costs for each plan offering were combined by taking a weighted average based on the number of participants enrolled in each plan, and were then trended to the valuation year at assumed trend rates. Segal did not review the accuracy of the costs or the underlying claims experience.
Valuation Date:	June 30, 2021
Roll-Forward Technique:	The results of the June 30, 2021 actuarial valuation were used to determine the Actuarially Determined Contribution for the fiscal year ending June 30, 2022. To project the Actuarially Determined Contribution for fiscal year 2023 and later, liabilities were rolled forward from June 30, 2021 using actuarial techniques.
Expected Return on Assets:	6.50% (previously, 7.00%) The long term expected rate of return 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 a 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.
Discount Rate:	6.50% (previously, 7.00%) The discount rate is equal to expected return on assets.
Asset Valuation Method:	Market Value

Increases:		Rate per year (%)				
	Years of Service	Groups 1 and 2	Teachers	Group 4		
	0	5.50	7.50	5.50		
	1	5.50	7.10	5.50		
	2	5.00	7.00	5.00		
	3	4.50	6.90	4.50		
	4	4.50	6.80	4.50		
	5	4.00	6.70	4.00		
	6	3.50	6.60	3.50		
	7	3.50	6.50	3.50		
	8	3.50	6.30	3.50		
	9	3.50	6.10	3.50		
	10	3.50	5.90	3.50		
	11	3.50	5.70	3.50		
	12	3.50	5.20	3.50		
	13	3.50	4.70	3.50		
	14	3.50	4.35	3.50		
	15-16	3.50	4.20	3.50		
	17-19	3.50	4.10	3.50		
	20 and later	3.50	4.00	3.50		

Mortality Rates:

Pre-Retirement (non-Teachers): RP-2014 Blue Collar Employee Mortality Table projected generationally with Scale MP-2021 (previously, projected generationally with Scale MP-2017)

Healthy Retiree (non-Teachers): RP-2014 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale MP-2021 (previously, projected generationally with Scale MP-2017)

Disabled Retiree (non-Teachers): RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year projected generationally with Scale MP-2011 (previously, projected generationally with Scale MP-2017)

Pre-Retirement (Teachers): Pub-2010 Teacher Employee Headcount-weighted Mortality Table projected generationally with Scale MP-2020 (previously, RP-2014 White Collar Employee Mortality Table projected generationally with Scale MP-2016)

Healthy Retiree (Teachers): Pub-2010 Teacher Healthy Retiree Headcount-weighted Mortality Table projected generationally with Scale MP-2020 (previously, RP-2014 White Collar Healthy Annuitant Mortality Table projected generationally using Scale MP-2016)

Disabled Retiree (Teachers): Pub-2010 Teacher Healthy Retiree Headcount-weighted Mortality Table projected generationally with Scale MP-2020 (previously, RP-2014 White Collar Healthy Annuitant Mortality Table projected generationally with Scale MP-2016)

The underlying tables with generational projection to the ages of participants as of the measurement date reasonably reflect the mortality experience of the plan as of the measurement date. The mortality tables were then adjusted to future years using generational projection to reflect future mortality improvement between the measurement date and those years.

Non-Teacher Annuitant Mortality Rates:

	Rate per year (%)							
	Hea	lthy	Disal	bled				
Age	Male	Female	Male	Female				
60	0.85	0.57	0.91	0.62				
70	1.97	1.40	2.16	1.54				
80	5.19	3.82	5.74	4.24				
90	14.64	11.19	16.18	12.43				

Note:

Rates shown are before generational projection.

Teacher Annuitant Mortality Rates:		Rate per year (%)								
		Healthy					Disab	led		
		Curi	rent	Prev	ious	Curr	rent	Prev	ious	
	Age	Male	Female	Male	Female	Male	Female	Male	Female	
	60	0.42	0.32	0.52	0.39	0.42	0.32	0.52	0.39	
	70	1.16	0.80	1.24	1.06	1.16	0.80	1.24	1.06	
	80	4.09	2.88	3.73	3.04	4.09	2.88	3.73	3.04	
	90	13.75	10.40	12.62	10.02	13.75	10.40	12.62	10.02	

Rate per year (%)

Termination Rates Before Retirement: Groups 1 and 2 (excluding Teachers)

			<u> </u>
	Morta	ality	
Age	Male	Female	Disability
20	0.05	0.02	0.01
25	0.06	0.02	0.02
30	0.06	0.03	0.03
35	0.07	0.03	0.06
40	0.08	0.04	0.10
45	0.13	0.07	0.15
50	0.22	0.12	0.19
55	0.36	0.19	0.24
60	0.61	0.27	0.28
Notes:			

Notes:

55% of the disability rates shown represent accidental disability. 75% of the mortality rates shown represent accidental death. Rates shown are before generational projection.

	Ra	Rate per year (%)	
	Morta	Mortality	
Age	Male	Female	Disability
20	0.05	0.02	0.20
25	0.06	0.02	0.40
30	0.06	0.02	0.60
35	0.07	0.03	0.60
40	0.08	0.04	0.60
45	0.13	0.07	1.55
50	0.22	0.12	2.50
55	0.36	0.19	2.50
60	0.61	0.27	2.50

Teachers	Teachers - Rate per year (%)
----------	------------------------------

	- <u></u>				
	Curre	ent	Previo	ous	
Age	Male	Female	Male	Female	Disability
20	0.04	0.01	0.03	0.01	0.00
25	0.02	0.01	0.03	0.01	0.01
30	0.03	0.02	0.03	0.02	0.01
35	0.04	0.02	0.04	0.02	0.01
40	0.05	0.03	0.04	0.03	0.01
45	0.08	0.05	0.07	0.06	0.03
50	0.13	0.08	0.12	0.09	0.05
55	0.19	0.12	0.20	0.14	0.07
60	0.29	0.18	0.33	0.21	0.07

Notes:

35% of the disability rates shown represent accidental disability.

75% of the death rates shown represent accidental death.

Rates shown are before generational projection.

Withdrawal Rates:	Rate per year (%)						
All Groups (excluding Teachers)	Years of Service	Groups 1 and 2	Years of Service	Group 4			
,	0	15.0	0 – 10	1.5			
	1	12.0	11+	0.0			
	2	10.0					
	3	9.0					
	4	8.0					
	5	7.6					
	6	7.5					
	7	6.7					
	8	6.3					
	9	5.9					
	10	5.4					
	11	5.0					
	12	4.6					
	13	4.1					
	14	3.7					
	15	3.3					
	16 – 20	2.0					
	21 – 29	1.0					
	30+	0.0					

Teachers	Rate per year (%)						
		0 – 4 Years	of Service	10+ Years o	of Service		
	Age	Male	Female	Male	Female	Male	Female
	20	13.0	10.0	5.5	7.0	1.5	5.0
	30	15.0	15.0	5.4	8.8	1.5	4.5
	40	13.3	10.5	5.2	5.0	1.7	2.2
	50	16.2	9.8	7.0	5.0	2.3	2.0

Retirement Rates: All Groups (excluding Teachers)

	Hired Pri	or to April 2, 2	012 - Rate	per year (%)
	Groups 1	and 2		Group 4
Age	Male	Female	Age	Male and Female
50	1.0	1.5	45	1.0
51	1.0	1.5	46	1.0
52	1.0	2.0	47	1.0
53	1.0	2.5	48	1.0
54	2.0	2.5	49	1.0
55	2.0	5.5	50	2.0
56	2.5	6.5	51	2.0
57	2.5	6.5	52	2.0
58	5.0	6.5	53	5.0
59	6.5	6.5	54	7.5
60	12.0	5.0	55	15.0
61	20.0	13.0	56	10.0
62	30.0	15.0	57	10.0
63	25.0	12.5	58	10.0
64	22.0	18.0	59	15.0
65	40.0	15.0	60	20.0
66	25.0	20.0	61	20.0
67	25.0	20.0	62	25.0
68	30.0	25.0	63	25.0
69	30.0	20.0	64	30.0
70	100.0	100.0	65	100.0

		Hired on or	after April 2, 2	2012 - Rate per	year (%)	
	Grou	ps 1 and 2 (exc	rs)	Grou	ıp 4	
	Current		Previ	ous	Current	Previous
Age	Male	Female	Male	Female	Male and Female	Male and Female
45 - 49						1.0
50					3.0	1.0
51					2.0	1.0
52					2.0	2.0
53					5.0	2.0
54					7.5	2.0
55					15.0	5.0
56					10.0	7.5
57					10.0	15.0
58					10.0	10.0
59					15.0	10.0
60	18.0	7.5	5.0	6.5	20.0	10.0
61	20.0	13.0	6.5	6.5	20.0	15.0
62	30.0	15.0	20.0	15.0	25.0	20.0
63	25.0	12.5	20.0	13.0	25.0	20.0
64	22.0	18.0	30.0	15.0	30.0	30.0
65	40.0	15.0	25.0	12.5	100.0	100.0
66	25.0	20.0	22.0	18.0	100.0	100.0
67	25.0	20.0	40.0	25.0	100.0	100.0
68	30.0	25.0	30.0	20.0	100.0	100.0
69	30.0	20.0	30.0	20.0	100.0	100.0
70	100.0	100.0	100.0	100.0	100.0	100.0

Teachers				Rate per	year (%)		
		Years of Service					
		Less than 20		20 –	29	30 or more	
	Age	Male	Female	Male	Female	Male	Female
	50 - 52			1.0	1.0	2.0	1.5
	53			1.5	1.0	2.0	1.5
	54			2.5	1.0	2.0	2.0
	55	5.0	3.0	3.0	3.0	6.0	5.0
	56	5.0	3.0	6.0	5.0	20.0	15.0
	57	5.0	4.0	10.0	8.0	40.0	35.0
	58	5.0	8.0	15.0	10.0	50.0	35.0
	59	10.0	8.0	20.0	15.0	50.0	35.0
	60	10.0	10.0	25.0	20.0	40.0	35.0
	61	20.0	12.0	30.0	25.0	40.0	35.0
	62	20.0	12.0	35.0	30.0	35.0	35.0
	63	25.0	15.0	40.0	30.0	35.0	35.0
	64	25.0	20.0	40.0	30.0	35.0	35.0
	65	25.0	25.0	40.0	40.0	35.0	35.0
	66	30.0	25.0	30.0	30.0	40.0	35.0
	67	30.0	30.0	30.0	30.0	40.0	30.0
	68	30.0	30.0	30.0	30.0	40.0	30.0
	69	30.0	30.0	30.0	30.0	40.0	30.0
	70	100.0	100.0	100.0	100.0	100.0	100.0
endents:	be three years	older than the	eir wives. For fu	iture retirees	etirees. For fut who elect to co se who also opt	ntinue their h	ealth coverag

Per Capita Health Costs:		022 medical and prescription				
	•	for spouses at selected ages. These costs are net of deductibles and o Age Non-Medicare Plans Medicare Plans				
	45	\$6,890	N/A			
	50	8,399	N/A			
	55	10,308	N/A			
	60	12,594	N/A			
	65	15,735	\$3,334			
	70	18,904	3,655			
	75	22,386	3,921			
	80	26,015	4,116			
Medicare Part B Premium for Current Eligible Retirees:	\$1,912					
Weighted Average Annual	Non-Medicare Pla	ans \$3,67	76			
Contribution Amounts:	Medicare Plans	\$2,42	21			

Health Care Cost Trend Rates:	future years. The	rates shown bel	ow are "net" and	are applied to th	ealth plan costs are expected to increase in ne net per capita costs shown above. The hat year's cost to yield the next year's
	Year Ending June 30	Non- Medicare	Medicare	Part B Premium	
	2022	7.06%	2.38%	4.50%	
	2023	7.06%	4.49%	4.50%	
	2024	6.83%	4.57%	4.50%	
	2025	6.59%	4.66%	4.50%	
	2026	6.36%	4.75%	4.50%	
	2027	6.00%	4.50%	4.50%	
	2028	5.75%	4.50%	4.50%	
	2029	5.50%	4.50%	4.50%	
	2030	5.25%	4.50%	4.50%	
	2031	5.00%	4.50%	4.50%	
	2032	4.75%	4.50%	4.50%	
	2033 and later	4.50%	4.50%	4.50%	
	the migration out	of Fallon plans r of Massachusetts	no longer offered) Postemploymer	, the next 4 yea t Benefit Other	es from FY2022 to FY2023 rates (including rs are the same as used in the June 30, 2021 than Pensions GASB Statement Nos. 74/75 sulting.
	established each	year using data published surve	sources such as ys prepared by th	the 2022 Segal ne S&P Dow Jor	ng Segal's internal guidelines, which are Health Trend Survey, internal client results, nes Indices, consulting firms and brokers,
Retiree Contribution Increase Rate:	Retiree contributi medical trends sh		and prescription o	lrug coverage a	re expected to increase with the respective
Administrative Expenses:	Administrative ex	penses are assu	med to be includ	ed in the fully in	sured premium rates.

Participation and Coverage Election:	125% of active employees with coverage are assumed to elect retiree coverage. This assumption includes an allowance for current and future inactive vested participants who may elect retiree coverage at retirement. 100% of retirees over age 65 are assumed to remain with their current medical plan for life. For future retirees hired before 1986 and current retirees under age 65, 100% (previously, 90%) are assumed to be eligible for Medicare and are assumed to enroll in a Medicare plan upon reaching age 65, and 0% (previously, 10%) are assumed to be ineligible for Medicare and to remain enrolled in a non-Medicare plan. For future retirees hired after 1986, 100% are assumed to be eligible for Medicare and are assumed to enroll in a Medicare plan upon reaching age 65. The participation and coverage election assumptions were based on a review of recent experience.
Plan Design:	Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.
Missing Participant Data:	A missing census item for a given participant was assumed to equal the average value of that item over all other participants of the same status for whom the item is known.
Demographic and Salary Increase Assumptions:	The demographic assumptions such as mortality, disability, turnover, and relative ages of spouses, and the salary increase assumption used in this valuation for non-teachers are the same as used for similar plans and for teachers are based on the Massachusetts Teachers' Retirement System Actuarial Valuation Report as of January 1, 2021, dated November 4, 2021, completed by PERAC. A review of the demographic and salary increase assumptions is beyond the scope of this assignment; however, we have no reason to doubt the reasonableness of the assumptions. The percent married and enrollment elections were based on the experience of the Town and the experience of similar plans.
Actuarial Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems Unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the model and reviews the test lives and results, under the supervision of the responsible actuary. Our claims costs assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate per capita claims cost calculations that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the paid claims, enrollments, plan provisions and assumptions into these models and reviews the results for reasonableness, under the supervision of the responsible actuary.

Justification for
Assumption Changes Since
Prior Valuation:

Based on past experience and future expectations, the following actuarial assumptions were changed:

- The per capita health costs and contibutions were updated to reflect current premiums and the costs in the most recent Commonwealth OPEB valuation report.
- The trend assumptions were revised, per the most recent Commonwealth OPEB valuation report.
- The mortality projection scale for non-teachers and the mortality assumption for teachers were updated.
- The retirement assumption for Group 1 and Group 4 employees hired on or after April 2, 2012 was updated
- The Medicare enrollment assumption for future retirees hired prior to 1986 and current retirees under age 65 was updated.
- The discount rate and expected return on assets was decreased from 7.00% to 6.50%.

Exhibit III: Summary of Plan

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Eligibility:	Retired and receiving a pension from the Norfolk County Contributory Retirement System or the Massachusetts Teachers' Retirement System.
	Members hired before April 2, 2012
	 Group 1 and Group 2 (including Teachers):
	 Retirees with at least 10 years of creditable service are eligible at age 55;
	 Retirees with at least 20 years of creditable service are eligible at any age.
	- Group 4
	Retirees are eligible at age 55;
	 Retirees with at least 20 years of creditable service are eligible at any age.
	Members hired on or after April 2, 2012
	Group 1 (including Teachers):
	 Retirees with at least 10 years of creditable service are eligible at age 60.
	- Group 2
	 Retirees with at least 10 years of creditable service are eligible at age 55.
	- Group 4
	Retirees are eligible at age 55;
	 Retirees with at least 10 years of creditable service are eligible at age 50.
Disability:	Accidental (job-related) Disability has no age or service requirement.
·	Ordinary (non-job related) Disability has no age requirement but requires 10 years of creditable service.
Pre-Retirement Death:	Surviving spouses of members who die in active service on Accidental (job-related) Death are eligible at any age.
	Surviving spouses of members who die in active service on Ordinary (non-job related) Death are eligible after two years of service.
Post-Retirement Death:	Surviving spouse is eligible.

Benefit Types:	Medical and prescription drug benefits are provided to all eligible retirees through a variety of plans offered through the Group Insurance Commission. The Town of Westwood also pays 50% of the Medicare Part B premium for 228 retirees and spouses age 65 or older and enrolled in a Medicare plan as of July 1, 2014. In addition, the Town of Westwood pays the Medicare Part B penalty for 15 retirees and spouses. Dental and life insurance benefits are also provided, but are 100% paid by the retirees, and so they are not valued in this report.
Duration of Coverage:	Lifetime.
Dependent Benefits:	Medical and Prescription Drugs.
Dependent Coverage:	Benefits are payable to a spouse for their lifetime, regardless of when the retirees dies.

Retiree Contributions:	Premium rates and retiree contributions as of July 1, 2021 are summarized below:				
	Non-Medicare Active and Retiree Plans	Monthly Premium	Town cost (\$)	Retiree cost (\$)	Retiree Cost %
	AllWays Health Partners Complete				
	Individual	\$767.96	\$522.22	\$245.74	32.0%
	• Family	\$2,005.69	\$1,363.87	\$641.82	32.0%
	Fallon Health Direct Care				
	 Individual 	\$637.52	\$433.51	\$204.01	32.0%
	• Family	\$1,611.71	\$1,095.96	\$515.75	32.0%
	Fallon Health Select Care				
	Individual	\$862.99	\$586.83	\$276.16	32.0%
	• Family	\$2,100.58	\$1,428.39	\$672.19	32.0%
	Harvard Pilgrim Independence Plan				
	 Individual 	\$964.26	\$655.70	\$308.56	32.0%
	• Family	\$2,356.13	\$1,602.17	\$753.96	32.0%
	Harvard Pilgrim Primary Choice Plan				
	Individual	\$697.95	\$474.61	\$223.34	32.0%
	• Family	\$1,781.96	\$1,211.73	\$570.23	32.0%
	Health New England				
	 Individual 	\$630.33	\$428.62	\$201.71	32.0%
	• Family	\$1,504.45	\$1,023.21	\$481.24	32.0%
	Tufts Health Plan Navigator				
	 Individual 	\$836.65	\$568.92	\$267.73	32.0%
	• Family	\$2,045.93	\$1,391.23	\$654.70	32.0%
	Tufts Health Plan Spirit				
	 Individual 	\$638.72	\$434.33	\$204.39	32.0%
	• Family	\$1,541.91	\$1,048.50	\$493.41	32.0%

	UniCare State Indemnity Plan/Basic with CIC (Comprehensive)				
	Individual	\$1,204.17	\$602.08	\$602.09	50.0%
	• Family	\$2,674.11	\$1,337.05	\$1,337.06	50.0%
	UniCare State Indemnity Plan/Community Choice				
	 Individual 	\$593.83	\$403.80	\$190.03	32.0%
	• Family	\$1,475.84	\$1,003.57	\$472.27	32.0%
	UniCare State Indemnity Plan/PLUS				
	 Individual 	\$781.99	\$531.75	\$250.24	32.0%
	• Family	\$1,866.72	\$1,269.37	\$597.35	32.0%
		Manthly	T	5	
	Medicare Retiree Plans	Monthly Premium	Town cost (\$)	Retiree cost (\$)	Retiree Cost (%)
	Medicare Retiree Plans Harvard Pilgrim Medicare Enhance	•			
		Premium	(\$)	(\$)	(%)
	Harvard Pilgrim Medicare Enhance Tufts Health Plan Medicare	Premium \$413.42	(\$) \$206.71	(\$) \$206.71	(%) 50.0%
	Harvard Pilgrim Medicare Enhance Tufts Health Plan Medicare Complement	\$413.42 \$392.59	(\$) \$206.71 \$196.29	(\$) \$206.71 \$196.30	(%) 50.0% 50.0%
Since Prior	Harvard Pilgrim Medicare Enhance Tufts Health Plan Medicare Complement Tufts Health Plan Medicare Preferred UniCare State Indemnity Plan/Medicare Extension (OME) with	\$413.42 \$392.59 \$332.70 \$408.84	\$206.71 \$196.29 \$166.35 \$204.42	\$206.71 \$196.30 \$166.35 \$204.42	50.0% 50.0% 50.0% 50.0%

Exhibit IV: Definition of Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions:	The estimates on which the cost of the Plan is calculated including: 1. Investment return — the rate of investment yield that the Plan will earn over the long-term future;	
	2. Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;	
	3. Retirement rates — the rate or probability of retirement at a given age;	
	 Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement. 	
Actuarial Accrued Liability (AAL):	Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.	
Unfunded Actuarial Accrued Liability (UAAL):	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There are many approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.	
Normal Cost:	The amount of contributions required to fund the benefit allocated to the current year of service.	
Actuarially Determined Contribution (ADC):	A target or recommended contribution to an OPEB plan for the reporting period based on the most recent measurement available.	
Valuation Date:	The date at which the actuarial valuation is performed	
Covered Employee Payroll:	The payroll of the employees that are provided OPEB benefits	
Entry Age Actuarial Cost Method:	An actuarial cost method where the present value of the projected benefits for an individual is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age	
Health Care Cost Trend Rates:	The rate of change in per capita health costs over time	
Discount Rate:	The interest rate used to determine the actuarial present value of projected benefit payments.	
Expected Return on Assets:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.	