

# **Town of Westwood**

Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2017

This report has been prepared at the request of the Town of Westwood to assist in administering the Plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Town of Westwood and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Copyright © 2018 by The Segal Group, Inc. All rights reserved.



116 Huntington Ave., 8th Floor Boston, MA 02116-5744 T 617.424.7300 www.segalco.com

May 7, 2018

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, 2017. 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 year ending June 30, 2018. It summarizes the actuarial data used in the valuation and analyzes the experience and changes in assumptions since the prior valuation. The GASB Statement Number 74 and 75 disclosure information for the fiscal year ending June 30, 2018 will be provided in a separate report when the June 30, 2018 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 Consulting 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 convenience.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

Kathleen A. Riley, FSA, MAAA, EA

Senior Vice President and Actuary

8691732v7/13960.004

Daniel J. Rhodes, FSA, MAAA

Vice President and Consulting Actuary

# **Table of Contents**

Town of Westwood Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2017

## **Section 1: Executive Summary**

Important Information about Actuarial Valuations	Ę
Purpose	
Important Information about Actuarial Valuations  Purpose  Highlights of the Valuation	
OPER Trust Information	8
Summary of Funding Schedules	
Summary of Funding Schedules  Other Considerations	
Section 2: Valuation Results	
Summary of Valuation Results	11
Department Results – 7.25% Discount Rate	12
Funding Schedules	13
Section 3: Supporting Information	
Exhibit I – Summary of Participant Data as of June 30, 2017 and June 30, 2015	17
Exhibit II – Actuarial Assumptions and Methods	
Exhibit III – Summary of Plan	
Exhibit IV – Definition of Terms	

# **Section 1: Executive Summary**

## Important Information about Actuarial Valuations

An actuarial valuation is an estimate of 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 Consulting ("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 coordinate 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

Part of the cost of a plan will be paid from existing assets – the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, provided by the Town of Westwood. Some plans include assets, such as private equity holdings, real estate, or hedge funds, that are not subject to valuation by reference to transactions in the marketplace. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to reflect gradually year-to-year changes in the market value of assets in determining the contribution requirements.

### 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. In a funding valuation, the forecasted benefits are then discounted to a present value using the expected rate of return that will be achieved on the plan's assets. 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.

Given the above, the user of Segal's actuarial valuation (or other actuarial calculations) needs to 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. 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 may 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 and 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 Consulting 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.

## Purpose

This report presents the results of our actuarial valuation of the Town of Westwood postemployment welfare benefit plan as of June 30, 2017. The purpose of this report is to calculate a recommended Actuarially Determined Contribution for the OPEB plan for the fiscal year ending June 30, 2018.

## Highlights of the Valuation

- > The unfunded actuarial accrued liability (UAAL) as of June 30, 2017 is \$37,801,000 based on an actuarial accrued liability (AAL) of \$42,829,000, an actuarial value of assets of \$5,028,000 and a discount rate of 7.5%. 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, 2017 the ratio of assets to the AAL (the funded ratio) is 11.7%. 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.
- > The UAAL of \$37,801,000 as of June 30, 2017 represents an increase of \$2,198,000 from \$35,603,000 as shown in the June 30, 2015 valuation. The unfunded liability had been expected increase \$1,614,000 due to normal plan operations. The difference between the actual and expected increase was the net effect of the following:
  - An actuarial experience gain decreased unfunded obligations by \$12,000. This was the net result of an investment gain partially offset by demographic changes.
  - Valuation assumption changes increased obligations by \$596,000. This was the net result of an increase in obligations due to 1) decreasing the discount rate from 7.75% to 7.50%, 2) changing the future trend on per capita health care costs and contributions, 3) updating the mortality assumptions and 4) using the Entry Age Normal methodology to value liabilities, partially offset by 5) updating the valuation-year per capita costs and contributions, 6) updating the marriage assumption and 7) revising the excise tax calculation on high cost health plans beginning in 2022. The complete set of assumptions is shown in Exhibit II.
- > The Actuarially Determined Contribution (ADC) for fiscal year 2018 is \$3,812,960. The ADC is calculated using a 28-year amortization effective July 1, 2017 with payments increasing at 3.0% per year.
- > The UAAL and ADC have also been calculated using a discount rate of 7.25%.
- > A summary of the valuation results using the 7.50% and, alternatively, 7.25% discount rate appears on page 11. Department results based on the 7.25% discount rate appear on page 12.

### **OPEB Trust Information**

As of June 30, 2017, the Town of Westwood has \$5,028,401 in assets, which are invested primarily in the State Retiree Benefits Trust Fund/PRIT. The table below shows the increase in assets from June 30, 2015 to June 30, 2017, which matches the figures shown in the Town's financial statements.

Summary of OPEB Trust Fund Assets	Total
Balance as of June 30, 2015	\$1,724,140
Fiscal year 2016 OPEB contributions	1,350,000
Net investment income	<u>70,746</u>
Balance as of June 30, 2016	\$3,144,886
<ul> <li>Fiscal year 2017 OPEB contributions</li> </ul>	1,350,000
Net investment income	<u>533,515</u>
Balance as of June 30, 2017	\$5,028,401

## Summary of Funding Schedules

This report includes three funding schedules for the Town of Westwood. The first two funding schedules reflect the Town's policy to contribute \$1,390,000 in fiscal 2018, increasing by \$25,000 per year thereafter. One schedule is based on the 7.5% discount rate (Funding Schedule 1) and one schedule is based on the 7.25% discount rate (Funding Schedule 2). The funding policy contribution plus pay-as-you-go benefits are less than the ADC in the early years of the schedules, but exceed the ADC in the latter years of the schedule. If all assumptions are met, and there are no changes in assumptions, plan of benefits, or the Town's funding policy, the liabilities are projected to be fully funded in 26 or 27 years, depending on the schedule. The third funding schedule is based on the 7.25% discount rate (Funding Schedule 3). The fiscal 2019 funding contribution is set to approximately \$2.4 million, which is the amount needed so that the unfunded liability will not increase. Fiscal 2020 and later contributions are set equal to the fiscal 2019 contribution. Under this funding schedule, the liabilities are projected to be fully funded in 20 years.

### Other Considerations

This valuation does not include the potential impact of any future changes due to the Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 other than the excise tax on high cost health plans beginning in 2022 (reflected in this valuation) and those previously adopted as of the valuation date.

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.



# **Section 2: Valuation Results**

## **Summary of Valuation Results**

_	June 3	0, 2017	June 30, 2015
	(7.50% discount rate)	(7.25% discount rate)	(7.75% discount rate)
Actuarial Accrued Liability by Participant Category			
1. Retirees, beneficiaries and dependents	\$20,618,152	\$21,109,153	\$20,169,989
2. Active employees	<u>22,211,319</u>	<u>23,082,635</u>	<u>17,157,489</u>
3. Total as of June 30, 2017 and 2015: (1) + (2)	\$42,829,470	\$44,191,788	\$37,327,478
4. Actuarial value of assets as of June 30, 2017 and 2015	<u>5,028,401</u>	<u>5,028,401</u>	<u>1,724,140</u>
5. Unfunded actuarial accrued liability (UAAL) as of June 30, 2017 and 2015: (3) - (4)	\$37,801,069	\$39,163,387	\$35,603,338
6. Funded ratio: (4) / (3)	11.7%	11.4%	4.6%
Actuarially Determined Contribution for Fiscal Year			
beginning:	July 1, 2017	July 1, 2017	July 1, 2015
7. Normal Cost, including adjustment for interest	\$1,462,482	\$1,548,606	\$1,333,249
8. Amortization method for UAAL	28-year closed, increasing at 3.0%	28-year closed, increasing at 3.0%	30-year closed, increasing at 4.0%
Amortization payment on UAAL, including adjustment for interest	<u>\$2,350,478</u>	<u>\$2,371,704</u>	<u>\$1,965,266</u>
10. Total Actuarially Determined Contribution: (7) + (9)	\$3,812,960	\$3,920,310	\$3,298,515
11. Projected benefit payments	1,830,497	1,830,497	1,860,003

Note: Assumes payment at the middle of fiscal year.

## Department Results - 7.25% Discount Rate

		General Government	School	Public Safety	DPW	Total
_	tuarial Accrued Liability by Participant itegory					
1.	Retirees, beneficiaries and dependents	\$2,543,675	\$12,845,372	\$4,775,708	\$944,398	\$21,109,153
2.	Active employees	<u>2,781,482</u>	14,046,278	<u>5,222,187</u>	<u>1,032,689</u>	23,082,635
3.	Total as of June 30, 2017 and 2015: (1) + (2)	\$5,325,157	\$26,891,650	\$9,997,895	\$1,977,087	\$44,191,788
4	Actuarial value of assets as of June 30, 2017 and 2015	605,928	<u>3,059,890</u>	<u>1,137,619</u>	<u>224,964</u>	<u>5,028,401</u>
5.	Unfunded actuarial accrued liability (UAAL) as of June 30, 2017 and 2015: (3) - (4)	\$4,719,229	\$23,831,760	\$8,860,276	\$1,752,123	\$39,163,387
6.	Funded ratio: (4) / (3)	11.4%	11.4%	11.4%	11.4%	11.4%
	ctuarially Determined Contribution for scal Year beginning July 1, 2017:					
7.	Normal Cost, including adjustment for interest	\$137,208	\$974,017	\$388,473	\$48,908	\$1,548,606
8.	Amortization method for UAAL	28-year closed, increasing at 3.0%	28-year closed, increasing at 3.0%	28-year closed, increasing at 3.0%	28-year closed, increasing at 3.0%	28-year closed, increasing at 3.0%
9.	Amortization payment on UAAL, including adjustment for interest	<u>\$285,793</u>	<u>\$1,443,233</u>	<u>\$536,571</u>	<u>\$106,107</u>	\$2,371,704
10	. Total Actuarially Determined Contribution: (9) + (11)	\$423,001	\$2,417,250	\$925,044	\$155,015	\$3,920,310
11	. Projected Benefit Payments	239,645	1,109,395	405,000	76,457	1,830,497

Notes: Assumes payment at the middle of fiscal year.

Retiree liabilities and projected benefit payments are estimated based on distribution of active liabilities in these subgroups. Assets as of June 30, 2017 are allocated in proportion to liabilities.

## **Funding Schedules**

## Funding Schedule 1 – 7.5% Discount Rate – Funding Policy Contributions - Fully Funded in Fiscal 2043

Fiscal Year Ending June 30	(1) Normal Cost	(2) Amortization of UAAL	(3) Actuarially Determined Contribution (1) + (2)	(4) Projected Benefits to be Paid by the Town	(5) Contribution to OPEB Trust	(6) Total Town Cost (4) + (5)	(7) Assets at End of Year	(8) AAL at End of Year	(9) UAAL at End of Year (8) - (7)
2018	\$1,462,482	\$2,350,478	\$3,812,960	\$1,830,497	\$1,390,000	\$3,220,497	\$6,846,714	\$45,660,114	\$38,813,400
2019	1,508,616	2,459,924	3,968,540	2,006,530	1,415,000	3,421,530	8,827,321	48,568,374	39,741,053
2020	1,556,205	2,570,405	4,126,610	2,193,679	1,440,000	3,633,679	10,982,394	51,550,055	40,567,661
2021	1,605,295	2,681,297	4,286,592	2,370,117	1,465,000	3,835,117	13,325,018	54,623,325	41,298,307
2022	1,655,934	2,793,398	4,449,332	2,597,911	1,490,000	4,087,911	15,869,259	57,743,412	41,874,153
2023	1,708,170	2,903,180	4,611,350	2,779,566	1,515,000	4,294,566	18,630,239	60,963,321	42,333,082
2024	1,762,054	3,013,657	4,775,711	2,961,278	1,540,000	4,501,278	21,624,213	64,292,188	42,667,975
2025	1,817,638	3,124,906	4,942,544	3,201,754	1,565,000	4,766,754	24,868,656	67,679,020	42,810,364
2026	1,874,975	3,232,415	5,107,390	3,419,579	1,590,000	5,009,579	28,382,352	71,153,467	42,771,115
2027	1,934,121	3,337,300	5,271,421	3,626,642	1,615,000	5,241,642	32,185,496	74,735,134	42,549,638
2028	1,995,133	3,439,915	5,435,048	3,875,421	1,640,000	5,515,421	36,299,796	78,390,745	42,090,949
2029	2,058,069	3,536,112	5,594,181	4,069,192	1,665,000	5,734,192	40,748,589	82,184,874	41,436,285
2030	2,122,991	3,629,480	5,752,471	4,272,651	1,690,000	5,962,651	45,556,962	86,119,925	40,562,963
2031	2,189,961	3,718,388	5,908,349	4,486,284	1,715,000	6,201,284	50,751,884	90,198,041	39,446,157
2032	2,259,043	3,800,676	6,059,719	4,710,598	1,740,000	6,450,598	56,362,346	94,421,068	38,058,722
2033	2,330,305	3,873,449	6,203,754	4,946,128	1,765,000	6,711,128	62,419,513	98,790,505	36,370,992
2034	2,403,814	3,932,771	6,336,585	5,193,434	1,790,000	6,983,434	68,956,888	103,307,453	34,350,565
2035	2,479,642	3,973,180	6,452,822	5,453,106	1,815,000	7,268,106	76,010,487	107,972,559	31,962,072
2036	2,557,862	3,986,933	6,544,795	5,725,761	1,840,000	7,565,761	83,619,026	112,785,953	29,166,927
2037	2,638,550	3,962,721	6,601,271	6,012,049	1,865,000	7,877,049	91,824,126	117,747,181	25,923,055
2038	2,721,783	3,883,445	6,605,228	6,312,652	1,890,000	8,202,652	100,670,529	122,855,127	22,184,598
2039	2,807,642	3,722,069	6,529,711	6,628,284	1,915,000	8,543,284	110,206,333	128,107,936	17,901,603
2040	2,896,209	3,433,330	6,329,539	6,959,699	1,940,000	8,899,699	120,483,243	133,502,915	13,019,672
2041	2,987,570	2,935,506	5,923,076	7,307,684	1,965,000	9,272,684	131,556,842	139,036,444	7,479,602
2042	3,081,813	2,064,826	5,146,639	7,673,068	1,990,000	9,663,068	143,486,881	144,703,863	1,216,982
2043	3,179,029	438,706	3,617,735	0	4,440,823	4,440,823	150,499,354	150,499,354	0
2044	3,279,311	0	3,279,311	0	3,279,311	3,279,311	156,415,812	156,415,812	0
2045	3,382,757	0	3,382,757	0	3,382,757	3,382,757	162,444,707	162,444,707	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.



Funding Schedule 2 - 7.25% Discount Rate - Funding Policy Contributions - Fully Funded in Fiscal 2044

Fiscal Year Ending June 30	(1) Normal Cost	(2) Amortization of UAAL	(3) Actuarially Determined Contribution (1) + (2)	(4) Projected Benefits to be Paid by the Town	(5) Contribution to OPEB Trust	(6) Total Town Cost (4) + (5)	(7) Assets at End of Year	(8) AAL at End of Year	(9) UAAL at End of Year (8) - (7)
2018	\$1,548,606	\$2,371,704	\$3,920,310	\$1,830,497	\$1,390,000	\$3,220,497	\$6,846,714	\$47,213,902	\$40,367,188
2019	1,597,457	2,493,546	4,091,003	2,006,530	1,415,000	3,421,530	8,808,497	50,213,267	41,404,770
2020	1,647,849	2,612,092	4,259,941	2,193,679	1,440,000	3,633,679	10,938,400	53,288,459	42,350,059
2021	1,699,830	2,732,298	4,432,128	2,370,117	1,465,000	3,835,117	13,248,611	56,457,712	43,209,101
2022	1,753,451	2,855,121	4,608,572	2,597,911	1,490,000	4,087,911	15,752,203	59,676,360	43,924,157
2023	1,808,764	2,977,323	4,786,087	2,779,566	1,515,000	4,294,566	18,463,196	62,997,518	44,534,322
2024	1,865,821	3,102,100	4,967,921	2,961,278	1,540,000	4,501,278	21,396,626	66,430,366	45,033,740
2025	1,924,678	3,229,823	5,154,501	3,201,754	1,565,000	4,766,754	24,568,620	69,924,008	45,355,388
2026	1,985,392	3,356,434	5,341,826	3,419,579	1,590,000	5,009,579	27,996,474	73,508,232	45,511,758
2027	2,048,021	3,483,462	5,531,483	3,626,642	1,615,000	5,241,642	31,698,738	77,202,734	45,503,996
2028	2,112,626	3,611,791	5,724,417	3,875,421	1,640,000	5,515,421	35,695,306	80,974,354	45,279,048
2029	2,179,269	3,738,013	5,917,282	4,069,192	1,665,000	5,734,192	40,007,516	84,887,761	44,880,245
2030	2,248,014	3,866,489	6,114,503	4,272,651	1,690,000	5,962,651	44,658,252	88,945,378	44,287,126
2031	2,318,928	3,996,675	6,315,603	4,486,284	1,715,000	6,201,284	49,672,056	93,149,370	43,477,314
2032	2,392,079	4,127,816	6,519,895	4,710,598	1,740,000	6,450,598	55,075,251	97,501,605	42,426,354
2033	2,467,537	4,258,855	6,726,392	4,946,128	1,765,000	6,711,128	60,896,069	102,003,603	41,107,534
2034	2,545,375	4,388,308	6,933,683	5,193,434	1,790,000	6,983,434	67,164,786	106,656,493	39,491,707
2035	2,625,669	4,514,068	7,139,737	5,453,106	1,815,000	7,268,106	73,913,876	111,460,950	37,547,074
2036	2,708,496	4,633,085	7,341,581	5,725,761	1,840,000	7,565,761	81,178,165	116,417,142	35,238,977
2037	2,793,936	4,740,844	7,534,780	6,012,049	1,865,000	7,877,049	88,995,005	121,524,656	32,529,651
2038	2,882,071	4,830,434	7,712,505	6,312,652	1,890,000	8,202,652	97,404,457	126,782,430	29,377,973
2039	2,972,986	4,890,842	7,863,828	6,628,284	1,915,000	8,543,284	106,449,484	132,188,672	25,739,188
2040	3,066,769	4,903,515	7,970,284	6,959,699	1,940,000	8,899,699	116,176,166	137,740,771	21,564,605
2041	3,163,510	4,834,823	7,998,333	7,307,684	1,965,000	9,272,684	126,633,923	143,435,205	16,801,282
2042	3,263,303	4,617,188	7,880,491	7,673,068	1,990,000	9,663,068	137,875,758	149,267,435	11,391,677
2043	3,366,244	4,092,498	7,458,742	8,056,721	2,015,000	10,071,721	149,958,516	155,231,792	5,273,276
2044	3,472,432	2,785,739	6,258,171	8,459,557	473,963	8,933,520	161,321,352	161,321,352	0
2045	3,581,970	0	3,581,970	0	3,581,970	3,581,970	167,527,802	167,527,802	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.



Funding Schedule 3 - 7.25% Discount Rate – \$2.4 Million Contribution in Fiscal 2019 and later - Fully Funded in Fiscal 2037

Fiscal Year	<i>(</i> )	(2)	(3) Actuarially Determined	(4) Projected Benefits to be	(5) Contribution	(6) Total Town	(7)	(8)	(9) UAAL at
Ending June 30	(1) Normal Cost	Amortization of UAAL	Contribution (1) + (2)	Paid by the Town	to OPEB Trust	Cost (4) + (5)	Assets at End of Year	AAL at End of Year	End of Year (8) - (7)
2018	\$1,548,606	\$2,371,704	\$3,920,310	\$1,830,497	\$1,390,000	\$3,220,497	\$6,846,714	\$47,213,902	\$40,367,188
2019	1,597,457	2,493,546	4,091,003	2,006,530	2,416,898	4,423,428	9,846,079	50,213,267	40,367,188
2020	1,647,849	2,546,634	4,194,483	2,193,679	2,416,898	4,610,577	13,062,898	53,288,459	40,225,561
2021	1,699,830	2,595,232	4,295,062	2,370,117	2,416,898	4,787,015	16,512,936	56,457,712	39,944,776
2022	1,753,451	2,639,424	4,392,875	2,597,911	2,416,898	5,014,809	20,213,102	59,676,360	39,463,258
2023	1,808,764	2,674,949	4,483,713	2,779,566	2,416,898	5,196,464	24,181,530	62,997,518	38,815,988
2024	1,865,821	2,703,781	4,569,602	2,961,278	2,416,898	5,378,176	28,437,669	66,430,366	37,992,697
2025	1,924,678	2,724,839	4,649,517	3,201,754	2,416,898	5,618,652	33,002,378	69,924,008	36,921,630
2026	1,985,392	2,732,310	4,717,702	3,419,579	2,416,898	5,836,477	37,898,028	73,508,232	35,610,204
2027	2,048,021	2,725,599	4,773,620	3,626,642	2,416,898	6,043,540	43,148,613	77,202,734	34,054,121
2028	2,112,626	2,702,980	4,815,606	3,875,421	2,416,898	6,292,319	48,779,866	80,974,354	32,194,488
2029	2,179,269	2,657,817	4,837,086	4,069,192	2,416,898	6,486,090	54,819,384	84,887,761	30,068,377
2030	2,248,014	2,590,428	4,838,442	4,272,651	2,416,898	6,689,549	61,296,767	88,945,378	27,648,611
2031	2,318,928	2,495,139	4,814,067	4,486,284	2,416,898	6,903,182	68,243,761	93,149,370	24,905,609
2032	2,392,079	2,364,584	4,756,663	4,710,598	2,416,898	7,127,496	75,694,412	97,501,605	21,807,193
2033	2,467,537	2,189,056	4,656,593	4,946,128	2,416,898	7,363,026	83,685,235	102,003,603	18,318,368
2034	2,545,375	1,955,521	4,500,896	5,193,434	2,416,898	7,610,332	92,255,393	106,656,493	14,401,100
2035	2,625,669	1,646,106	4,271,775	5,453,106	2,416,898	7,870,004	101,446,887	111,460,950	10,014,063
2036	2,708,496	1,235,676	3,944,172	5,725,761	2,416,898	8,142,659	111,304,764	116,417,142	5,112,378
2037	2,793,936	687,789	3,481,725	6,012,049	2,076,346	8,088,395	121,524,656	121,524,656	0
2038	2,882,071	0	2,882,071	0	2,882,071	2,882,071	126,782,430	126,782,430	0
2039	2,972,986	0	2,972,986	0	2,972,986	2,972,986	132,188,672	132,188,672	0
2040	3,066,769	0	3,066,769	0	3,066,769	3,066,769	137,740,771	137,740,771	0
2041	3,163,510	0	3,163,510	0	3,163,510	3,163,510	143,435,205	143,435,205	0
2042	3,263,303	0	3,263,303	0	3,263,303	3,263,303	149,267,436	149,267,436	0
2043	3,366,244	0	3,366,244	0	3,366,244	3,366,244	155,231,793	155,231,793	0
2044	3,472,432	0	3,472,432	0	3,472,432	3,472,432	161,321,352	161,321,352	0
2045	3,581,970	0	3,581,970	0	3,581,970	3,581,970	167,527,802	167,527,802	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.





# **Section 3: Supporting Information**

## EXHIBIT I – SUMMARY OF PARTICIPANT DATA AS OF JUNE 30, 2017 AND JUNE 30, 2015

	June 30, 2017	June 30, 2015
Active employees covered for medical benefits		
Number of employees		
- Male	156	147
- Female	<u>258</u>	<u>238</u>
- Total	414	385
Average age	46.1	45.3
Average service	11.3	10.9
Retired employees, spouses and beneficiaries covered for medical benefits		
Number of individuals	393	376
Average age	73.6	73.3
Retired employees with life insurance coverage*		
Number of individuals	176	173
Average age	75.3	75.7

<sup>\* 27</sup> and 23 retirees have life insurance only as of June 30, 2017 and June 30, 2015, respectively.

## **EXHIBIT II – ACTUARIAL ASSUMPTIONS AND METHODS**

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 (previously, Projected Unit Credit)
Per Capita Cost Development:	Per capita costs were based on the fully insured premium rates effective January 1, 2018 for Medicare plans and July 1, 2017 for non-Medicare plans. Premiums were combined by taking a weighted average based on the number of participants in each plan, and were then trended to the midpoint of the valuation year at assumed trend rates. Actuarial factors were applied to the premium to estimate individual retiree and spouse costs by age and by gender.
Valuation Date:	June 30, 2017
Roll-Forward Technique:	The results of the June 30, 2017 actuarial valuation were used to determine the Actuarially Determined Contribution for the fiscal year ending June 30, 2018.
Expected Return on Assets:	7.5%
	The long term expected rate of return on OPEB investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan 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:	7.5%
	The discount rate is equal to expected return on assets.

Salary Increa	ses:
---------------	------

	Rate per year (%)	
Groups 1 and 2	Teachers	Group 4
5.50	7.50	5.50
5.50	7.10	5.50
5.00	7.00	5.00
4.50	6.90	4.50
4.50	6.80	4.50
4.00	6.70	4.00
3.50	6.60	3.50
3.50	6.50	3.50
3.50	6.30	3.50
3.50	6.10	3.50
3.50	5.90	3.50
3.50	5.70	3.50
3.50	5.20	3.50
3.50	4.70	3.50
3.50	4.35	3.50
3.50	4.20	3.50
3.50	4.10	3.50
3.50	4.00	3.50
	5.50 5.50 5.50 5.50 5.50 4.50 4.50 4.50	5.50       7.50         5.50       7.10         5.00       7.00         4.50       6.90         4.50       6.80         4.00       6.70         3.50       6.60         3.50       6.50         3.50       6.30         3.50       5.90         3.50       5.70         3.50       4.70         3.50       4.35         3.50       4.20         3.50       4.10

**Asset Valuation Method:** 

Market Value

#### **Mortality Rates:**

*Pre-Retirement (Non-Teachers):* RP-2014 Blue Collar Employee Mortality Table projected generationally with Scale MP-20162D set forward 1 year for females (previously, RP-2000 Employee Mortality Table projected generationally with Scale BB2D from 2009)

Healthy (Non-Teachers): RP-2014 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale MP-20162D set forward 1 year for females (previously, RP-2000 Healthy Annuitant Mortality Table projected generationally with Scale BB2D from 2009)

Disabled (Non-Teachers): RP-2000 Healthy Annuitant Mortality Table projected generationally with Scale BB2D from 2015

*Pre-Retirement (Teachers):* RP-2014 White Collar Employee Mortality Table projected generationally with Scale MP-2016 (previously, RP-2014 Employee Mortality Table projected generationally with Scale BB2D from 2014)

Healthy (Teachers): RP-2014 White Collar Healthy Annuitant Mortality Table projected generationally with Scale MP-2016 (previously, RP-2014 Healthy Annuitant Mortality Table projected generationally with Scale BB2D from 2014)

Disabled (Teachers): RP-2014 Healthy Annuitant Mortality Table set forward 4 years projected generationally with Scale BB2D from 2014

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 (%)							
	Curr	ent	Previo	ously				
Age	Male	Female	Male	Female				
60	0.85	0.62	0.82	0.62				
70	1.97	1.54	2.22	1.67				
80	5.19	4.24	6.44	4.59				
90	14.64	12.43	18.34	13.17				

Note: Rates shown are before generational projection.

### **Teacher Annuitant Mortality** Rates:

	Rate per year (%)				
	Curr	ent	Previo	ously	
Age	Male	Female	Male	Female	
60	0.52	0.39	0.78	0.52	
70	1.24	1.06	1.68	1.29	
80	3.73	3.04	4.47	3.48	
90	12.62	10.02	13.59	10.71	

Note: Rates shown are before generational projection.

### **Termination Rates Before** Retirement:

• Groups 1 and 2 (excluding Teachers)

	Rate per year (%)					
		Morta	lity			
	Curre	ent	Previo	usly		
Age	Male	Female	Male	Female	Disability	
20	0.05	0.02	0.03	0.02	0.02	
25	0.06	0.02	0.04	0.02	0.02	
30	0.06	0.03	0.04	0.03	0.03	
35	0.07	0.03	0.08	0.05	0.06	
40	0.08	0.05	0.11	0.07	0.10	
45	0.13	0.08	0.15	0.11	0.15	
50	0.22	0.14	0.21	0.17	0.19	
55	0.36	0.20	0.30	0.25	0.24	
60	0.61	0.30	0.49	0.39	0.28	

Notes: 55% of the disability rates shown represent accidental disability.

75% of the mortality rates shown represent accidental death (previously, 55%)

Rates shown are before generational projection.

### • Group 4

		Rat	te per year (%)		
		Mortal	ity		
	Curre	nt	Previou	usly	
Age	Male	Female	Male	Female	Disability
20	0.05	0.02	0.03	0.02	0.20
25	0.06	0.02	0.04	0.02	0.40
30	0.06	0.03	0.04	0.03	0.60
35	0.07	0.03	0.08	0.05	0.60
40	0.08	0.05	0.11	0.07	0.60
45	0.13	0.08	0.15	0.11	1.55
50	0.22	0.14	0.21	0.17	2.50
55	0.36	0.20	0.30	0.25	2.50
60	0.61	0.30	0.49	0.39	2.50

Notes: 90% of the mortality and disability rates shown represent accidental death and disability. Rates shown are before generational projection.

• Teachers	_	Teachers - Rate per year (%)				
	_		Mortali	ity		
	_	Current		Previo	us	
	Age	Male	Female	Male	Female	Disability
	20	0.03	0.01	0.04	0.02	0.00
	25	0.03	0.01	0.05	0.02	0.01
	30	0.03	0.02	0.05	0.02	0.01
	35	0.04	0.02	0.05	0.03	0.01
	40	0.04	0.03	0.06	0.04	0.01
	45	0.07	0.06	0.10	0.07	0.03
	50	0.12	0.09	0.17	0.11	0.05
	55	0.20	0.14	0.28	0.17	0.07
	60	0.33	0.21	0.47	0.24	0.07
		ne disability rates ne death rates sho own are before g	own represent ac	cidental death.	bility.	

#### Withdrawal Rates: Rate per year (%) Groups 1 and 2 Years of Service **Years of Service Group 4** All Groups (excluding Teachers) 15.0 1.5 0 0 - 100.0 12.0 11+ 2 10.0 3 9.0 8.0 7.6 7.5 6 6.7 7 8 6.3 5.9 9 10 5.4 11 5.0 12 4.6 13 4.1 14 3.7 15 3.3 16 - 202.0 21 - 291.0 30+ 0.0 Teachers Rate per year (%) 0 - 4 Years of Service 5 – 9 Years of Service 10+ Years of Service Age Male **Female** Male **Female** Male **Female** 20 13.0 10.0 5.5 1.5 5.0 7.0 30 15.0 8.8 1.5 4.5 15.0 5.4 40 13.3 10.5 5.2 5.0 1.7 2.2

16.2

9.8

7.0

5.0

2.3

50

2.0

### **Retirement Rates:**

• All Groups (excluding Teachers)

	Hired Prior to April 2, 2012 - 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 af	ter April 2, 2012 - Ra	ate per year (%)			
	Groups 1 and 2					
	(excluding	Group 4				
Age	Male	Female	Male and Female			
45 - 49			1.0%			
50			1.0			
51			1.0			
52			2.0			
53			2.0			
54			2.0			
55			5.0			
56			7.5			
57			15.0			
58			10.0			
59			10.0			
60	5.0	6.5	10.0			
61	6.5	6.5	15.0			
62	20.0	15.0	20.0			
63	20.0	13.0	20.0			
64	30.0	15.0	30.0			
65	25.0	12.5	100.0			
66	22.0	18.0	100.0			
67	40.0	25.0	100.0			
68	30.0	20.0	100.0			
69	30.0	20.0	100.0			
70	100.0	100.0	100.0			

Teachers	-	Rate per year (%)  Years of Service					
	_	Less th	an 20	20 –		30 or ı	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

Dependents:

Demographic data was available for spouses of current retirees. For future retirees, husbands were assumed to be three years older than their wives. For future retirees who elect to continue their health coverage at retirement, 65% (previously, 80% of males and 60% of females) were assumed to have an eligible spouse who also opts for health coverage at that time.

### **Per Capita Health Costs:**

Fiscal year 2017-2018 medical and prescription drug claims costs are shown in the table below for retirees and for spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions.

	Non-Medicare Plans				Medicare	Plans		
	Reti	ree	Spo	use	Reti	ree	Spouse	
Age	Male	Female	Male	Female	Male	Female	Male	Female
45	\$7,464	\$9,363	\$4,630	\$6,989	N/A	N/A	N/A	N/A
50	8,859	10,091	6,188	8,102	N/A	N/A	N/A	N/A
55	10,521	10,862	8,280	9,378	N/A	N/A	N/A	N/A
60	12,494	11,708	11,085	10,877	N/A	N/A	N/A	N/A
65	14,839	12,613	14,839	12,613	\$4,398	\$3,738	\$4,398	\$3,738
70	17,198	13,593	17,198	13,593	5,097	4,029	5,097	4,029
75	18,534	14,631	18,534	14,631	5,493	4,336	5,493	4,336
80	19,958	15,774	19,958	15,774	5,915	4,675	5,915	4,675

Medicare Part B Premium for Current Retirees:

\$1,608

Weighted Average Annual Contribution Amounts:

- Non-Medicare Plans \$3,197
- Medicare Plans 2,391

#### **Health Care Cost Trend Rates:**

Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are "net" and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that is applied to that year's cost to yield the next year's projected cost.

Year Ending June 30	Non-Medicare	Medicare	Part B Premium
2018	8.5%	8.5%	5.0%
2019	8.0%	8.0%	5.0%
2020	7.5%	7.5%	5.0%
2021	7.0%	7.0%	5.0%
2022	6.5%	6.5%	5.0%
2023	6.0%	6.0%	5.0%
2024	5.5%	5.5%	5.0%
2025 and later	5.0%	5.0%	5.0%

The trend rate assumptions were developed using Segal's internal guidelines, which are established each year using data sources such as the 2018 Segal Health Trend Survey, internal client results, trends from other published surveys prepared by the S&P Dow Jones Indices, consulting firms and brokers, and CPI statistics published by the Bureau of Labor Statistics. The Non-Medicare and Medicare trend assumptions are the same as used in the Commonwealth of Massachusetts Postemployment Benefit Other than Pensions Actuarial Valuation as of January 1, 2017, dated November 10, 2017.

## Retiree Contribution Increase Rate:

Retiree contributions for medical and prescription drug coverage are expected to increase with the respective medical trends shown above.

### **Administrative Expenses:**

Administrative expenses are assumed to be included in the fully insured premium rates.

# Participation and Coverage Election:

- 115% 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, 90% are assumed to be eligible for Medicare and are assumed to enroll in a Medicare plan upon reaching age 65, and 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.				
Health Care Reform Assumption:	This valuation does not include the potential impact of any future changes due to the Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 other than the excise tax on high cost health plans beginning in 2022 (reflected with this valuation) and those previously adopted as of the valuation date. The excise tax calculation assumes that the current cost sharing provisions of the postretirement benefits will also apply to the additional cost of the plan due to the excise tax.				
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 Teachers' Retirement System Actuarial Valuation Report as of January 1, 2017, dated September 25, 2017, completed by PERAC.				
	The percent married and enrollment elections were based on the experience of the Town and the experience of similar plans. 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.				
Justification for Assumption	Based on past experience and future expectations, the following actuarial assumptions were changed:				
Changes Since Prior Valuation:	The per capita health care costs were updated to reflect recent experience.				
	The trend assumptions were revised to reflect future expectations.				
	The mortality assumptions were updated as described earlier.				
	<ul> <li>The impact of the excise tax on high cost health plans beginning in 2022 was recalculated with this valuation, including a change in the indexing of the tax threshold amounts.</li> </ul>				
	<ul> <li>The funding method was changed to comply with the requirements of GASB Statement No. 74.</li> </ul>				

### **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.
	<ul> <li>Members hired before April 2, 2012</li> <li>Group 1 and Group 2 (including Teachers):</li> <li>» Retirees with at least 10 years of creditable service are eligible at age 55;</li> <li>» Retirees with at least 20 years of creditable service are eligible at any age.</li> <li>Group 4</li> <li>» Retirees are eligible at age 55;</li> <li>» Retirees with at least 20 years of creditable service are eligible at any age.</li> </ul>
	<ul> <li>Members hired on or after April 2, 2012</li> <li>Group 1 (including Teachers):</li> <li>» Retirees with at least 10 years of creditable service are eligible at age 60.</li> <li>Group 2</li> <li>» Retirees with at least 10 years of creditable service are eligible at age 55.</li> <li>Group 4</li> <li>» Retirees are eligible at age 55;</li> <li>» Retirees with at least 10 years of creditable service are eligible at age 50.</li> </ul>
Disability:	Accidental (job-related) Disability has no age or service requirement.
Pre-Retirement Death:	Ordinary (non-job related) Disability has no age requirement but requires 10 years of creditable service.  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 retirees and spouses age 65 or older and enrolled in a Medicare plan as of July 1, 2014 and 50% of the retiree life insurance premium.

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, 2017 (unless otherwise noted) are summarized below:

**Non-Medicare Active Monthly** Retiree Retiree Town **Premium** cost cost % and Retiree Plans cost **Tufts Navigator**  Individual \$728.84 \$495.61 \$233.23 32.0% \$569.09 Family \$1,778.41 \$1,209.32 32.0% **NHP Prime**  Individual \$554.03 \$376.74 \$177.29 32.0% \$1,468.22 \$998.39 \$469.83 Family 32.0% **Fallon Direct**  Individual \$554.66 \$377.17 32.0% \$177.49 Family \$1,331.19 \$905.21 \$425.98 32.0% **Fallon Select**  Individual \$737.06 \$501.20 \$235.86 32.0% \$1,768.88 \$1,202.84 \$566.04 32.0% Family **Harvard Pilgrim Independence**  Individual \$824.22 \$560.47 \$263.75 32.0% Family \$2,011.09 \$1,367.54 \$643.55 32.0% **Harvard Pilgrim Primary Choice**  Individual \$620.69 \$422.07 \$198.62 32.0% Family \$1,514.53 \$1,029.88 \$484.65 32.0% **Health New England**  Individual \$548.16 \$372.75 \$175.41 32.0% Family \$1,358.97 \$924.10 \$434.87 32.0% **Tufts Spirit**  Individual \$553.28 \$376.23 \$177.05 32.0%

\$1,331.91

\$905.70

\$426.21

Family

32.0%

Non-Medicare Active and Retiree Plans	Monthly Premium	Town cost	Retiree cost	Retiree cost %
Unicare State Indemnity/Basic with CIC				
Individual	\$1,038.80	\$519.40	\$519.40	50.0%
Family	\$2,430.54	\$1,215.27	\$1,215.27	50.0%
Unicare State Indemnity/Basic with CIC				
Individual	\$991.80	\$495.90	\$495.90	50.0%
Family	\$2,321.52	\$1,160.76	\$1,160.76	50.0%
Unicare Community Choice				
Individual	\$520.59	\$354.00	\$166.59	32.0%
Family	\$1,249.47	\$849.64	\$399.83	32.0%
Unicare Plus				
Individual	\$693.19	\$471.37	\$221.82	32.0%
Family	\$1,656.13	\$1,126.17	\$529.96	32.0%
	Monthly	Town	Retiree	Retiree
Medicare Retiree Plans	Premium	cost	cost	Cost %
Unicare State Indemnity/Medicare with CIC	\$380.64	\$190.32	\$190.32	50.0%
HPHC Medicare Enhance	\$423.05	\$211.53	\$211.53	50.0%
Tufts Medicare Complement	\$382.26	\$191.13	\$191.13	50.0%
Tufts Medicare Preferred*	\$316.10	\$158.05	\$158.05	50.0%
Fallon Senior Plan*	\$363.28	\$181.64	\$181.64	50.0%
* Premiums are effective January 1, 2018.				

## **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:
	(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
	<ul><li>(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;</li></ul>
	(c) Retirement rates — the rate or probability of retirement at a given age;
	(d) 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:	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
Healthcare 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.
Real Rate of Return:	The rate of return on an investment after removing inflation