

Town of Lancaster Other Postemployment Benefits Plan

GASB 74 & GASB 75 Actuarial Valuation

With a Valuation Date of July 1, 2017

As of the Measurement Date:
June 30, 2019

For the Reporting Date:
June 30, 2019

Delivered August 28, 2019



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August 28, 2019

Personal and Confidential

Ms. Cheryl Gariepy
Finance Director
Town of Lancaster
695 Main Street, PO Box 293
Lancaster, MA 01523

Dear Ms. Gariepy:

We have performed an actuarial valuation of the Town of Lancaster Other Postemployment Benefits Plan for the Reporting Date & fiscal year ending June 30, 2019 with a Measurement Date of June 30, 2019 and a Valuation Date of July 1, 2017. The figures presented in this report reflect the adoption, by the Town of Lancaster, of Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75") effective for the fiscal years ending June 30, 2017 and June 30, 2018 respectively.

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

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

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

Very truly yours,



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

August 28, 2019

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Lancaster other postemployment benefit programs with a Valuation Date of July 1, 2017 with a Measurement Date of June 30, 2019 for the Reporting Date & fiscal year ending June 30, 2019 in accordance with Government Account Standards Board Statement No. 74 & 75 and Actuarial Standards of Practice as issued by the American Academy of Actuaries. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Numbers 74 & 75 for the determination of the liability for postemployment benefits other than pensions.

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

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

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

A handwritten signature in black ink, appearing to read 'P. Elmore', with a long horizontal flourish extending to the right.

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

EXECUTIVE SUMMARY

What caused plan liabilities to change from FY 18 to FY 19?

For the year ending on the Measurement Date of June 30, 2019, the Plan saw no experience because this was an interim valuation. During the period there was an investment loss of \$27,299 below the expected return.

Assumption changes

- ✓ None

Changes in Benefits Terms

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

EXECUTIVE SUMMARY

Recognition Period

- ✓ Changes in assumptions & plan experience are amortized into the net OPEB expense over time until fully recognized
- ✓ Changes in benefit terms are to be recognized in full immediately

Events Subsequent to the Measurement Date

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

Discount Rate Determinants

- ✓ Employer Current and Future Benefit Payments
- ✓ Municipal Bond Rate – The municipal bond rate was 2.79% as of June 30, 2019.
- ✓ Current Asset Level – The Town had \$2,084,690 of assets as of June 30, 2019.
- ✓ Funding Policy - The Town is expected to contribute \$300,000 annually.
- ✓ Investment Policy - The Town is expected to earn 7.04% on assets based on its investment policy.

EXECUTIVE SUMMARY

Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare integrated) plans - represent 75.38% of the total plan liabilities
- ✓ Age at which plan participants retire
- ✓ Percentage of plan participants who elect coverage for themselves and/or a spouse
- ✓ Medical care cost inflation rate - We currently assume medical costs increase at 5.00% per year for non-Medicare integrated plans and 5.00% per year for Medicare integrated plans.
- ✓ Discount Rate (7.00%) – Higher discount rates yield lower liabilities and vice versa
- ✓ Cost Sharing - Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance

Medicare Buy-In

Recently, some of our clients have seen substantial cost savings by “buying into” Medicare for retirees who would otherwise be ineligible. To buy into Medicare the Town would need to pay the Medicare Part A premium and the Medicare Part A and B penalties. While the cost to buy into Medicare is significant, it is likely still far less than the cost of the claims that the associated retiree is expected to incur. Under Actuarial Standards of Practice for OPEB, we are required to reflect the projected higher healthcare costs that occur as retirees age. The Town currently has one retiree who is over the age of 65 and is enrolled in an Active medical plan rather than a Medicare Supplement (Senior) plan. You may wish to review the retiree's Medicare eligibility to see if the retiree is already eligible for Medicare or if a “buy-in” is appropriate as this could yield a reduction in your OPEB annual costs and disclosed liabilities.

EXECUTIVE SUMMARY

Key Plan Metrics

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

Representative Plan Statistics		
Valuation Date	July 1, 2017	July 1, 2017
Measurement Date & Period Ending	June 30, 2019	July 1, 2017
Reporting Date/Fiscal Year End	June 30, 2019	June 30, 2018
Total OPEB Liability	3,312,831	2,963,189
Per Eligible Active Plan Participant	43,034	43,682
Per Retiree/Spouse Plan Participant	44,396	32,177
Total Annual Service Cost (annual benefit accrual)	81,862	66,988
Per Eligible Active Plan Participant	1,819	1,489
Expected Employer Share of Retiree Costs	126,128	100,568
Per Retiree/Spouse Plan Participant	4,069	3,244
Net OPEB Liability as a % of Covered Payroll	37.60%	52.80%
Average Annual Medical Plan Premium (Single Coverage)	6,504	6,194
Average Annual Medical Plan Premium (Family Coverage)	25,233	24,031
<u>Projected 2022 Excise Tax Thresholds</u>		
Annual Medical Plan Premium (Single Coverage)	12,511	
Annual Medical Plan Premium (Family Coverage)	32,676	

PRINCIPAL RESULTS OF THE VALUATION

Town of Lancaster

Assuming Funding - 7.00% discount rate

Comparison of Plan Liabilities to Prior Valuation

Valuation Date	July 1, 2017	July 1, 2017
For the Measurement Period ending on the Measurement Date of:	June 30, 2019	July 1, 2017
For the Reporting Period & Fiscal Year ending on:	June 30, 2019	June 30, 2018
I. Total OPEB Liability		
A. Actives	1,936,549	1,965,701
B. Retirees/Disabled	<u>1,376,282</u>	<u>997,488</u>
C. Total	3,312,831	2,963,189
II. Fiduciary Net Position [Plan Assets]	2,084,690	1,337,681
III. Net OPEB Liability (Asset) [I. - II.]	1,228,141	1,625,508
IV. Funded Ratio [II. / I.]	62.93%	45.14%
V. Number of Eligible Participants		
A. Actives	45	45
B. Retirees/Disabled & Dependents	<u>31</u>	<u>31</u>
C. Total	76	76
VI. Service Cost	81,862	66,988
VII. Financial Statement Expense	239,640	228,582
VIII. Employer Contribution to the OPEB Trust	0	(151,000)
IX. Deferred Inflow of Resources	(33,025)	(44,033)
X. Deferred Outflow of Resources	265,766	325,235
XI. Money Weighted Rate of Return	5.66%	12.77%
XII. 20-year Municipal Bond Rate (SAPIHG)	2.79%	3.13%
XIII. Expected Long Term Rate of Return (Net of Expense)	7.04%	7.04%
XIV. Crossover Year	N/A	N/A
XV. Discount Rate	7.00%	7.00%

PRINCIPAL RESULTS OF THE VALUATION

Town of Lancaster Plan Liabilities as of the June 30, 2019 Measurement Date Assuming Funding - 7.00% discount rate

	Town Employees and Retirees	Police Employees and Retirees	Water Enterprise Fund Employees and Retirees	Total
I. Total OPEB Liability				
A. Actives	824,289	914,798	197,462	1,936,549
B. Retirees/Disabled	<u>1,307,848</u>	<u>68,434</u>	<u>0</u>	<u>1,376,282</u>
C. Total	2,132,137	983,232	197,462	3,312,831
II. Fiduciary Net Position [Plan Assets]	1,351,033	610,125	123,532	2,084,690
III. Net OPEB Liability (Asset) [I. - II.]	781,104	373,107	73,930	1,228,141
IV. Number of Eligible Participants				
A. Actives	27	14	4	45
B. Retirees/Disabled	<u>30</u>	<u>1</u>	<u>0</u>	<u>31</u>
C. Total	57	15	4	76
For the Reporting Date and Fiscal Year Ending June 30, 2019				
V. Service Cost	48,421	27,908	5,533	81,862
VI. Financial Statement Expense	136,249	86,120	17,271	239,640
VII. Employer Share of Costs	(107,575)	(17,972)	(581)	(126,128)
VIII. Employer (Payments)/Withdrawals to/from OPEB Trust	0	0	0	0
IX. Total Employer Contribution [VII. + VIII.]	(107,575)	(17,972)	(581)	(126,128)

PRINCIPAL RESULTS OF THE VALUATION

Town of Lancaster

Assuming Funding - 7.00% discount rate

For the Period ending on the June 30, 2019 Measurement Date

	Actives			Retirees/Disabled			Grand Total
	Under Age 65	Age 65+	Actives Total	Under Age 65	Age 65 +	Retirees Total	
Present Value of Future Benefits							
A. Participants	503,767	997,223	1,500,990	120,925	1,086,450	1,207,375	2,708,365
B. Spouses	<u>334,683</u>	<u>757,197</u>	<u>1,091,880</u>	<u>67,023</u>	<u>101,884</u>	<u>168,907</u>	<u>1,260,787</u>
C. Total	838,450	1,754,420	2,592,870	187,948	1,188,334	1,376,282	3,969,152
Total OPEB Liability							
A. Participants	370,028	740,437	1,110,465	120,925	1,086,450	1,207,375	2,317,840
B. Spouses	<u>257,655</u>	<u>568,429</u>	<u>826,084</u>	<u>67,023</u>	<u>101,884</u>	<u>168,907</u>	<u>994,991</u>
C. Total	627,683	1,308,866	1,936,549	187,948	1,188,334	1,376,282	3,312,831
Service Cost							
A. Participants	14,213	34,106	48,319	0	0	0	48,319
B. Spouses	<u>8,674</u>	<u>24,869</u>	<u>33,543</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>33,543</u>
C. Total	22,887	58,975	81,862	0	0	0	81,862

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2019 Measurement Date)

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

1. OPEB Expense Development

Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2019	
Description	Amount
I. Service Cost	81,862
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	220,923
III. Deferred (Inflows)/Outflows from Plan Design Changes*	0
IV. Deferred (Inflows)/Outflows from Plan Experience**	16,383
V. Deferred (Inflows)/Outflows from Changes of Assumptions**	64,925
VI. Projected earnings on OPEB plan investments	(138,905)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	(5,548)
VIII. Financial statement expense [I. + II.+ III. + IV. + V. + VI. + VII.]	239,640

* Recognized Immediately

** Amortized over 5.00 years

*** Amortized over 5.00 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

2. Changes in Net OPEB Liability

Changes in Net OPEB Liability			
	Increase (Decrease)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
I. Balances for June 30, 2018	2,963,189	1,337,681	1,625,508
II. Prior Period Adjustment	<u>172,985</u>	<u>635,403</u>	<u>(462,418)</u>
III. Balances for June 30, 2018 with Adjustment [I. + II.]	3,136,174	1,973,084	1,163,090
Changes for the year:			
IV. Service Cost	81,862	0	81,862
V. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	220,923	0	220,923
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	0	0	0
IX. Net investment income	0	111,606	(111,606)
X. Employer contributions to Trust	0	126,128	(126,128)
XI. Benefit payments withdrawn from Trust	0	(126,128)	126,128
XII. Benefit payments excluding Implicit Cost	(112,652)	0	(112,652)
XIII. Implicit Cost amount	(13,476)	0	(13,476)
XIV. Total Benefit payments including Implicit Cost [XII. + XIII.]	(126,128)	0	(126,128)
XV. Administrative expense	0	0	0
XVI. Other Charges	0	0	0
XVII. Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]	<u>176,657</u>	<u>111,606</u>	<u>65,051</u>
XVIII. Balances at June 30, 2019 [III.+XVII.]	3,312,831	2,084,690	1,228,141

* Recognized Immediately

** Amortized over 5.00 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

3. Changes in Net OPEB Expense

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of differences between expected & actual experience									
Fiscal	Differences between actual & expected experience	Recognition Period (years)	Remaining Balance	2019	2020	2021	2022	2023	2024
2017									
2018	81,917	5.00	49,151	16,383	16,383	16,383	16,385		
2019	0	5.00	0	0	0	0	0	0	
2020									
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			49,151						
Net increase (decrease) in OPEB expense				16,383	16,383	16,383	16,385	0	0

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of changes in assumptions									
Fiscal	Differences from changes in Actuarial Assumptions	Recognition Period (years)	Remaining Balance	2019	2020	2021	2022	2023	2024
2017									
2018	324,626	5.00	194,776	64,925	64,925	64,925	64,926		
2019	0	5.00	0	0	0	0	0	0	
2020									
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			194,776						
Net increase (decrease) in OPEB expense				64,925	64,925	64,925	64,926	0	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of differences between projected & actual earnings on OPEB plan investments									
Fiscal	Differences between actual & expected earnings	Recognition Period (years)	Remaining Balance	2019	2020	2021	2022	2023	2024
2017									
2018	(55,041)	5.00	(33,025)	(11,008)	(11,008)	(11,008)	(11,009)		
2019	27,299	5.00	21,839	5,460	5,460	5,460	5,460	5,459	
2020									
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			(11,186)						
Net increase (decrease) in OPEB expense				(5,548)	(5,548)	(5,548)	(5,549)	5,459	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2019 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Statement of Outflows & Inflows Arising from Current & Prior Reporting Periods for the Measurement Period ending on June 30, 2019 to be reported for the fiscal year ending June 30, 2019		
	Deferred Outflows of Resources	Deferred Inflows of Resources
I. Differences between actual & expected experience	49,151	0
II. Changes of assumptions	194,776	0
III. Net difference between projected & actual earnings on OPEB plan investments	<u>21,839</u>	<u>(33,025)</u>
IV. Total [I.+II.+III.]	265,766	(33,025)
Annual Amortization of Deferred (Inflows)/Outflows		
The balance of deferred (inflows)/outflows as of June 30, 2019 will be recognized in future years as shown below.		
	Year ending June 30:	
	2020	75,760
	2021	75,760
	2022	75,762
	2023	5,459
	2024	0
	Thereafter	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

4. Funding Policy

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. For the period ending on the June 30, 2019 Measurement Date, total Town premiums plus implicit costs for the retiree medical program were \$126,128. The Town also made a contribution to an OPEB Trust of \$0 for a total contribution during the measurement period of \$126,128 to be reported on the financial statement for the fiscal year ending June 30, 2019.

5. Investment Policy

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

Investment Target Allocation & Expected Long-Term Real Rate of Return			
Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return
Domestic Equity - Large Cap	14.50%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	3.50%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	16.00%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	6.00%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	20.00%	Domestic Fixed Income	2.00%
International Fixed Income	3.00%	International Fixed Income	3.00%
Alternatives	23.00%	Alternatives	6.50%
Real Estate	14.00%	Real Estate	6.25%
Cash & Cash Equivalents	0.00%	Cash & Cash Equivalents	0.00%
Total	100.00%		
		I. Real Rate of Return*	4.79%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	7.54%
		IV. Investment Expense	0.50%
		V. Net Investment Return* [III.-IV.]	7.04%

*Geometric Mean

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

6. Funded Status and Funding Progress

Fiscal Year	Measurement Date	Fiduciary Net Position	Total OPEB Liability	Net OPEB Liability	Funded Ratio	NOL as a % of	
						Covered Payroll	Covered Payroll
2016	7/1/2015	\$423,219	\$3,235,589	\$2,812,370	13.1%	\$2,283,429	123.2%
2017	7/1/2016	\$1,052,331	\$3,411,295	\$2,358,964	30.8%	\$2,351,931	100.3%
2018	7/1/2017	\$1,337,681	\$2,963,189	\$1,625,508	45.1%	\$3,081,362	52.8%
2019	6/30/2019	\$2,084,690	\$3,312,831	\$1,228,141	62.9%	\$3,269,017	37.6%
2020	6/30/2020 (est.)	\$2,541,833	\$3,462,132	\$920,299	73.4%	\$3,367,088	27.3%
2021	6/30/2021 (est.)	\$3,031,158	\$3,624,823	\$593,665	83.6%	\$3,468,100	17.1%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

7. Effect of 1% Change in Healthcare Trend

<u>Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2019 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Trend Rate</u>	<u>1% Increase</u>
I. Total OPEB Liability	2,467,053	3,312,831	4,364,493
II. Fiduciary Net Position	<u>2,084,690</u>	<u>2,084,690</u>	<u>2,084,690</u>
III. Net OPEB Liability (Asset) [I.-II.]	382,363	1,228,141	2,279,803
IV. Service Cost	51,335	81,862	121,548

8. Effect of 1% Change in Discount Rates

<u>Impact of a 1% Change in the Discount Rate as of the June 30, 2019 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
I. Total OPEB Liability	3,779,811	3,312,831	2,845,851
II. Fiduciary Net Position	<u>2,084,690</u>	<u>2,084,690</u>	<u>2,084,690</u>
III. Net OPEB Liability (Asset) [I.-II.]	1,695,121	1,228,141	761,161
IV. Service Cost	103,354	81,862	60,370

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

9. Money Weighted Rate of Return

	Plan Investments / Net External Cash Flows	Periods Invested	Period Weight
I. Beginning value - June 30, 2018	1,973,084	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	0	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	0	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	0	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
<u>June</u>	<u>0</u>	0	0.0000
II. Total net external cash flow	0		
III. Earnings and increase in fair value	111,606		
IV. Ending value - June 30, 2019 [I.+II.+III.]	2,084,690		
Money Weighted Rate of Return	5.66%		
Asset Value - June 30, 2019	2,084,690		

EXHIBIT A
FINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2019 Measurement Date)

10. OPEB Liability, OPEB Expense

	Fiscal Year Ending June 30, 2019			
	Town Employees and Retirees	Police Employees and Retirees	Water Enterprise Fund Employees and Retirees	Total
I. Total OPEB Liability as of June 30, 2019	2,132,137	983,232	197,462	3,312,831
II. Fiduciary Net Position as of June 30, 2019	1,351,033	610,125	123,532	2,084,690
III. Net OPEB Liability (Asset) as of June 30, 2019 [I. - II.]	781,104	373,107	73,930	1,228,141
IV. Service Cost	48,421	27,908	5,533	81,862
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	128,951	76,490	15,482	220,923
VI. Projected Earnings on OPEB Plan Investments	(89,858)	(40,785)	(8,262)	(138,905)
VII. Net Recognition of Deferred (Inflows)/Outflows	48,735	22,507	4,518	75,760
VIII. Expense Related to Change in Benefit Terms	0	0	0	0
IX. Financial Statement Expense [IV. + V. + VI. + VII. + VIII.]	136,249	86,120	17,271	239,640
X. Employer Share of Costs	(107,575)	(17,972)	(581)	(126,128)
XI. Employer (Payments) Withdrawals to/from OPEB Trust	0	0	0	0
XII. Total Employer Contribution [X. + XI.]	(107,575)	(17,972)	(581)	(126,128)
XIII. Net OPEB Expense [IX. + XII.]	28,674	68,148	16,690	113,512

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2019 Measurement Date)

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

Valuation Date	July 1, 2017
For the Measurement Period ending on the Measurement Date of:	June 30, 2019
For the Reporting Period & Fiscal Year ending on:	June 30, 2019
Source of Deferred Inflow/Outflow	
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	49,151
II. Deferred (Inflow)/Outflow from Investment Experience	(11,186)
III. Deferred (Inflow)/Outflow from Changes in Assumptions	194,776
Change in Deferred Inflow/Outflow	
I. Deferred Outflow at the beginning of the period	325,235
II. Deferred Outflow created during the period	27,299
III. Deferred Outflow recognized during the period	86,768
IV. Change in Deferred Outflow (II. - III.)	(59,469)
V. Deferred Outflow at end of the period (I. + IV.)	265,766
VI. Deferred Inflow at the beginning of the period	(44,033)
VII. Deferred Inflow created during the period	0
VIII. Deferred Inflow recognized during the period	(11,008)
IX. Change in Deferred Inflow (VII. - VIII.)	11,008
X. Deferred Inflow at end of the period (VI. + IX.)	(33,025)
Net OPEB Liability	
I. Net OPEB Liability at beginning of period	1,163,090
II. Service Cost	81,862
III. Interest on Total OPEB Liability, Service Cost, and Payments	220,923
IV. Projected Investment Income	(138,905)
V. Total Employer Contributions	(126,128)
VI. Expense Related to Change in Benefit Terms	0
VII. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + IV. + V. + VI.)	37,752
VIII. Deferred Outflow created during the period	27,299
IX. Deferred Inflow created during the period	0
X. Net OPEB Liability at end of period (I. + VII. + VIII. + IX.)	1,228,141
Net OPEB Expense	
I. Service Cost	81,862
II. Interest on Total OPEB Liability, Service Cost, and Payments	220,923
III. Projected Investment Income	(138,905)
IV. Recognition of Deferred (Inflow)/Outflow	75,760
V. Expense Related to Change in Benefit Terms	0
VI. Financial Statement Expense (I. + II. + III. + IV. + V.)	239,640
VII. Benefit Payments	(126,128)
VIII. Contributions to Trust	0
IX. Total Employer Payments (VII. + VIII.)	(126,128)
X. Total Net OPEB Expense under GASB 75 (VI. + IX.)	113,512

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION
(As of the June 30, 2019 Measurement Date)

The Town's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which is composed of the service cost and an amortization of the unfunded liability. We have used a 30 year flat dollar amortization of the Town's unfunded liability for the purpose of calculating ADC. The following table shows the components of the Town's annual ADC and the amount actually contributed to the plan:

Actuarially Determined Contribution - Deficiency / (Excess)			
	For the Fiscal Year Ending:		
	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
I. Service Cost	81,862	75,082	66,988
II. 30 year level dollar amortization of NOL	<u>92,497</u>	<u>91,806</u>	<u>102,977</u>
III. Actuarial Determined Contribution [I. + II.]	174,359	166,888	169,965
IV. Contributions in relation to the actuarially determined contribution	<u>(126,128)</u>	<u>(602,797)</u>	<u>(251,568)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>48,231</u>	<u>(435,909)</u>	<u>(81,603)</u>
Covered employee payroll	3,269,017	3,173,803	3,081,362
Contributions as a % of covered employee payroll	3.86%	18.99%	8.16%
Discount Rate	7.00%	7.00%	7.00%
Money Weighted Rate of Return	5.66%	9.10%	12.77%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION (As of the June 30, 2019 Measurement Date)

Schedule of Changes in the Town's Net OPEB Liability and Related Ratios			
Valuation Date	July 1, 2017	July 1, 2017	July 1, 2017
For the Reporting Period & Fiscal Year ending on:	June 30, 2019	June 30, 2018	June 30, 2017
Total OPEB Liability	3,312,831	3,136,174	2,556,646
I. Service Cost	81,862	75,082	66,988
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	220,923	180,403	170,603
III. Changes in Benefit terms	0	0	0
IV. Difference between Expected & Actual Plan Experience	0	91,425	0
V. Changes of assumptions	0	343,577	0
VI. Benefit Payments Excluding Implicit Cost	(112,652)	(100,696)	N/A
VII. Implicit Cost Amount	(13,476)	(10,263)	N/A
VIII. Total Benefit payments including Implicit Cost [VI.+VII.]	(126,128)	(110,959)	(100,568)
IX. Net Change in OPEB liability [I.+II.+III.+IV.+V.+VIII.]	176,657	579,528	137,023
X. Total OPEB liability - beginning of period	3,136,174	2,556,646	2,419,623
XI. Total OPEB liability - end of period [IX.+X.]	3,312,831	3,136,174	2,556,646
Plan Fiduciary Net Position	2,084,690	1,973,084	1,337,681
XII. Earning from Plan Investments	111,606	143,565	134,350
XIII. Employer Contribution to trust	126,128	602,797	251,568
XIV. Benefit payments from trust, including refunds of member contributions	(126,128)	(110,959)	(100,568)
XV. Administrative expense	0	0	0
XVI. Other	0	0	0
XVII. Net change in plan fiduciary net position [XII.+XIII.+XIV.+XV.+XVI.]	111,606	635,403	285,350
XVIII. Plan fiduciary net position - beginning of period	1,973,084	1,337,681	1,052,331
XIX. Plan fiduciary net position - end of period [XVII.+XVIII.]	2,084,690	1,973,084	1,337,681
XX. Net OPEB Liability [XI.-XIX.]	1,228,141	1,163,090	1,218,965
XXI. Plan fiduciary net position as % of total OPEB liability [XIX. / XI.]	62.93%	62.91%	52.32%
XXII. Covered employee payroll	3,269,017	3,173,803	3,081,362
XXIII. Plan NOL as % of covered employee payroll [XX. / XXII.]	37.57%	36.65%	39.56%
Single Discount Rate to calculate Plan Liabilities	7.00%	7.00%	7.00%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2019 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of July 1, 2017.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, June 30, 2019.

Actuarial Assumptions:

Investment Rate of Return:	7.04%, net of OPEB plan investment expense, including inflation.
Municipal Bond Rate	2.79% as of June 30, 2019 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
Single Equivalent Discount Rate:	7.00%, net of OPEB plan investment expense, including inflation.
Inflation:	2.75% as of June 30, 2019 and for future periods
Salary Increases:	3.00% annually as of June 30, 2019 and for future periods
Cost of Living Adjustment:	Not Applicable
Pre-Retirement Mortality:	RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Post-Retirement Mortality:	RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Disabled Mortality:	RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2019 Measurement Date)

Plan Membership

At July 1, 2017, OPEB plan membership consisted of the following:

Inactive employees or beneficiaries currently receiving benefits:	31
Active Employees:	<u>45</u>
Total:	76

Events Subsequent to the Measurement Date

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

Changes in Assumptions: From June 30, 2018 to June 30, 2019

✓ None

Contributions:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town contributed \$0 beyond the pay-as-you-go cost for the period ending on the June 30, 2019 Measurement Date. For the year ending on the June 30, 2019 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$126,128. \$13,476 of the \$126,128 represents implicit cost.

APPENDIX I - LIABILITIES, ASSETS, & CASH FLOWS

CURRENT FUNDING POLICY (OPEN GROUP)

Funding - 7.00% discount rate									
For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Excess	VIII. Total
			Position as of Measurement Date with an expected 7.04% return					Employer Payments (beyond claims)	Employer Payments [VI. + VII.]
2019	June 30, 2019	3,312,831	2,084,690	1,228,141	62.93%	81,862	126,128	0	126,128
2020	June 30, 2020	3,462,132	2,541,833	920,299	73.42%	86,373	139,833	300,000	439,833
2021	June 30, 2021	3,624,823	3,031,158	593,665	83.62%	91,274	160,457	300,000	460,457
2022	June 30, 2022	3,794,388	3,554,932	239,456	93.69%	97,016	171,300	300,000	471,300
2023	June 30, 2023	3,973,836	4,115,580	(141,744)	103.57%	103,477	179,960	300,000	479,960
2024	June 30, 2024	4,160,413	4,405,317	(244,904)	105.89%	109,413	191,617	0	191,617
2025	June 30, 2025	4,360,118	4,715,451	(355,333)	108.15%	115,141	196,304	0	196,304
2026	June 30, 2026	4,567,927	5,047,419	(479,492)	110.50%	120,930	207,645	0	207,645
2027	June 30, 2027	4,786,874	5,402,757	(615,883)	112.87%	126,290	215,539	0	215,539
2028	June 30, 2028	5,018,251	5,783,111	(764,860)	115.24%	131,314	218,000	0	218,000
2029	June 30, 2029	5,267,475	6,190,242	(922,767)	117.52%	139,318	226,587	0	226,587
2030	June 30, 2030	5,525,751	6,626,035	(1,100,284)	119.91%	145,678	240,783	0	240,783
2031	June 30, 2031	5,785,564	7,092,508	(1,306,944)	122.59%	151,691	264,329	0	264,329
2032	June 30, 2032	6,051,654	7,591,821	(1,540,167)	125.45%	159,761	279,257	0	279,257
2033	June 30, 2033	6,317,436	8,126,285	(1,808,849)	128.63%	166,775	302,445	0	302,445
2034	June 30, 2034	6,583,350	8,698,375	(2,115,025)	132.13%	175,463	333,029	0	333,029
2035	June 30, 2035	6,861,772	9,310,741	(2,448,969)	135.69%	184,632	357,215	0	357,215
2036	June 30, 2036	7,145,147	9,966,217	(2,821,070)	139.48%	193,135	382,009	0	382,009
2037	June 30, 2037	7,441,297	10,667,839	(3,226,542)	143.36%	202,290	398,452	0	398,452
2038	June 30, 2038	7,752,132	11,418,855	(3,666,723)	147.30%	212,233	414,217	0	414,217
2039	June 30, 2039	8,078,949	12,222,742	(4,143,793)	151.29%	221,809	427,877	0	427,877
2040	June 30, 2040	8,417,418	13,083,223	(4,665,805)	155.43%	232,063	447,507	0	447,507
2041	June 30, 2041	8,761,949	14,004,282	(5,242,333)	159.83%	244,007	468,062	0	468,062
2042	June 30, 2042	9,107,043	14,990,183	(5,883,140)	164.60%	256,108	505,102	0	505,102
2043	June 30, 2043	9,484,761	16,045,492	(6,560,731)	169.17%	269,389	524,822	0	524,822
2044	June 30, 2044	9,890,883	17,175,095	(7,284,212)	173.65%	282,896	535,696	0	535,696
2045	June 30, 2045	10,304,979	18,384,222	(8,079,243)	178.40%	297,331	565,933	0	565,933
2046	June 30, 2046	10,748,831	19,678,471	(8,929,640)	183.08%	312,309	588,923	0	588,923
2047	June 30, 2047	11,219,607	21,063,835	(9,844,228)	187.74%	328,263	597,168	0	597,168
2048	June 30, 2048	11,735,141	22,546,729	(10,811,588)	192.13%	344,494	621,845	0	621,845
2049	June 30, 2049	12,263,609	24,134,019	(11,870,410)	196.79%	362,952	654,598	0	654,598
2050	June 30, 2050	12,846,979	25,833,054	(12,986,075)	201.08%	381,715	651,948	0	651,948

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES

Projection of Contributions using a July 1, 2017 Valuation Date

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2019	3,269,017	0	3,269,017	0	126,128	0	126,128
June 30, 2020	3,164,068	203,020	3,367,088	0	139,833	0	139,833
June 30, 2021	3,055,325	412,775	3,468,100	0	160,457	0	160,457
June 30, 2022	2,925,293	646,850	3,572,143	0	171,300	0	171,300
June 30, 2023	2,762,173	917,134	3,679,307	0	179,960	0	179,960
June 30, 2024	2,672,306	1,117,380	3,789,686	0	191,617	0	191,617
June 30, 2025	2,636,873	1,266,504	3,903,377	0	196,304	0	196,304
June 30, 2026	2,572,859	1,447,619	4,020,478	0	207,645	0	207,645
June 30, 2027	2,481,578	1,659,514	4,141,092	0	215,539	0	215,539
June 30, 2028	2,357,581	1,907,744	4,265,325	0	218,000	0	218,000
June 30, 2029	2,165,430	2,227,855	4,393,285	0	224,967	1,620	226,587
June 30, 2030	2,101,572	2,423,512	4,525,084	0	236,587	4,196	240,783
June 30, 2031	2,031,309	2,629,528	4,660,837	0	256,342	7,987	264,329
June 30, 2032	1,936,478	2,864,184	4,800,662	0	266,061	13,196	279,257
June 30, 2033	1,882,238	3,062,444	4,944,682	0	282,704	19,741	302,445
June 30, 2034	1,777,824	3,315,198	5,093,022	0	307,697	25,332	333,029
June 30, 2035	1,696,162	3,549,651	5,245,813	0	325,472	31,743	357,215
June 30, 2036	1,613,527	3,789,660	5,403,187	0	343,008	39,001	382,009
June 30, 2037	1,525,292	4,039,991	5,565,283	0	353,284	45,168	398,452
June 30, 2038	1,448,889	4,283,352	5,732,241	0	362,162	52,055	414,217
June 30, 2039	1,385,771	4,518,437	5,904,208	0	366,298	61,579	427,877
June 30, 2040	1,321,930	4,759,404	6,081,334	0	373,804	73,703	447,507
June 30, 2041	1,210,332	5,053,442	6,263,774	0	379,615	88,447	468,062
June 30, 2042	1,106,259	5,345,428	6,451,687	0	398,291	106,811	505,102
June 30, 2043	967,199	5,678,039	6,645,238	0	396,849	127,973	524,822
June 30, 2044	849,523	5,995,072	6,844,595	0	389,283	146,413	535,696
June 30, 2045	747,886	6,302,047	7,049,933	0	398,480	167,453	565,933
June 30, 2046	651,218	6,610,213	7,261,431	0	398,749	190,174	588,923
June 30, 2047	550,764	6,928,510	7,479,274	0	386,247	210,921	597,168
June 30, 2048	468,400	7,235,252	7,703,652	0	388,204	233,641	621,845
June 30, 2049	297,896	7,636,866	7,934,762	0	394,896	259,702	654,598
June 30, 2050	212,920	7,959,885	8,172,805	0	363,755	288,193	651,948
June 30, 2051	153,609	8,264,380	8,417,989	0	359,922	318,986	678,908
June 30, 2052	107,022	8,563,507	8,670,529	0	358,467	353,299	711,766
June 30, 2053	68,989	8,861,656	8,930,645	0	331,401	390,197	721,598
June 30, 2054	54,460	9,144,104	9,198,564	0	323,816	426,904	750,720
June 30, 2055	41,063	9,433,458	9,474,521	0	319,304	467,124	786,428
June 30, 2056	10,468	9,748,289	9,758,757	0	314,530	509,271	823,801
June 30, 2057	0	10,051,520	10,051,520	0	309,200	552,633	861,833
June 30, 2058	0	10,353,066	10,353,066	0	303,596	599,074	902,670

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES (CONTINUED)

Projection of Contributions using a July 1, 2017 Valuation Date							
For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2059	0	10,663,658	10,663,658	0	297,753	648,568	946,321
June 30, 2060	0	10,983,568	10,983,568	0	291,639	700,755	992,394
June 30, 2061	0	11,313,075	11,313,075	0	285,263	756,458	1,041,721
June 30, 2062	0	11,652,467	11,652,467	0	278,623	815,791	1,094,414
June 30, 2063	0	12,002,041	12,002,041	0	271,672	878,402	1,150,074
June 30, 2064	0	12,362,102	12,362,102	0	264,315	943,485	1,207,800
June 30, 2065	0	12,732,965	12,732,965	0	256,477	1,012,578	1,269,055
June 30, 2066	0	13,114,954	13,114,954	0	248,100	1,084,673	1,332,773
June 30, 2067	0	13,508,403	13,508,403	0	239,055	1,159,479	1,398,534
June 30, 2068	0	13,913,655	13,913,655	0	230,113	1,238,114	1,468,227
June 30, 2069	0	14,331,065	14,331,065	0	222,443	1,320,501	1,542,944
June 30, 2070	0	14,760,997	14,760,997	0	213,776	1,406,742	1,620,518
June 30, 2071	0	15,203,827	15,203,827	0	204,177	1,497,176	1,701,353
June 30, 2072	0	15,659,942	15,659,942	0	193,720	1,592,080	1,785,800
June 30, 2073	0	16,129,740	16,129,740	0	182,481	1,691,031	1,873,512
June 30, 2074	0	16,613,632	16,613,632	0	170,544	1,794,293	1,964,837
June 30, 2075	0	17,112,041	17,112,041	0	158,105	1,902,742	2,060,847
June 30, 2076	0	17,625,402	17,625,402	0	145,204	2,015,625	2,160,829
June 30, 2077	0	18,154,164	18,154,164	0	132,191	2,133,600	2,265,791
June 30, 2078	0	18,698,789	18,698,789	0	119,170	2,257,364	2,376,534
June 30, 2079	0	19,259,753	19,259,753	0	106,312	2,386,697	2,493,009
June 30, 2080	0	19,837,546	19,837,546	0	93,669	2,522,137	2,615,806
June 30, 2081	0	20,432,672	20,432,672	0	81,579	2,664,015	2,745,594
June 30, 2082	0	21,045,652	21,045,652	0	70,064	2,812,776	2,882,840
June 30, 2083	0	21,677,022	21,677,022	0	59,339	2,968,658	3,027,997
June 30, 2084	0	22,327,333	22,327,333	0	49,702	3,132,118	3,181,820
June 30, 2085	0	22,997,153	22,997,153	0	40,975	3,303,624	3,344,599
June 30, 2086	0	23,687,068	23,687,068	0	33,375	3,483,561	3,516,936
June 30, 2087	0	24,397,680	24,397,680	0	26,818	3,672,447	3,699,265
June 30, 2088	0	25,129,610	25,129,610	0	21,280	3,870,684	3,891,964
June 30, 2089	0	25,883,498	25,883,498	0	16,668	4,078,842	4,095,510
June 30, 2090	0	26,660,003	26,660,003	0	12,909	4,297,462	4,310,371
June 30, 2091	0	27,459,803	27,459,803	0	9,869	4,527,144	4,537,013
June 30, 2092	0	28,283,597	28,283,597	0	7,412	4,768,486	4,775,898
June 30, 2093	0	29,132,105	29,132,105	0	5,507	5,022,130	5,027,637

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

FIDUCIARY NET POSITION PROJECTION DISCLOSURES

Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2017 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Portion of Employer Contributions for Current Plan Members	III. Total Benefit Payments	IV. Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Investment Earnings	VIII. Ending Fiduciary Net Position for Current Plan Members
June 30, 2019	1,973,084	126,128	126,128	0	0	0	111,606	2,084,690
June 30, 2020	2,084,690	139,833	139,833	0	300,000	281,911	147,668	2,514,269
June 30, 2021	2,514,269	160,457	160,457	0	300,000	264,294	186,149	2,964,712
June 30, 2022	2,964,712	171,300	171,300	0	300,000	245,675	217,216	3,427,603
June 30, 2023	3,427,603	179,960	179,960	0	300,000	225,220	249,096	3,901,919
June 30, 2024	3,901,919	191,617	191,617	0	300,000	211,546	282,015	4,395,480
June 30, 2025	4,395,480	196,304	196,304	0	300,000	202,661	316,454	4,914,595
June 30, 2026	4,914,595	207,645	207,645	0	300,000	191,982	352,630	5,459,207
June 30, 2027	5,459,207	215,539	215,539	0	300,000	179,777	390,549	6,029,533
June 30, 2028	6,029,533	218,000	218,000	0	300,000	165,820	430,217	6,625,570
June 30, 2029	6,625,570	224,967	224,967	0	300,000	147,869	471,557	7,243,376
June 30, 2030	7,243,376	236,587	240,783	0	300,000	139,328	514,755	7,893,263
June 30, 2031	7,893,263	256,342	264,329	0	300,000	130,747	560,210	8,576,233
June 30, 2032	8,576,233	266,061	279,257	0	300,000	121,013	607,954	9,292,004
June 30, 2033	9,292,004	282,704	302,445	0	300,000	114,198	658,108	10,044,569
June 30, 2034	10,044,569	307,697	333,029	0	300,000	104,721	710,761	10,834,719
June 30, 2035	10,834,719	325,472	357,215	0	300,000	97,001	766,121	11,666,098
June 30, 2036	11,666,098	343,008	382,009	0	300,000	89,588	824,393	12,541,078
June 30, 2037	12,541,078	353,284	398,452	0	300,000	82,222	885,737	13,463,869
June 30, 2038	13,463,869	362,162	414,217	0	300,000	75,828	950,480	14,438,122
June 30, 2039	14,438,122	366,298	427,877	0	300,000	70,413	1,018,880	15,465,836
June 30, 2040	15,465,836	373,804	447,507	0	300,000	65,213	1,091,051	16,548,397
June 30, 2041	16,548,397	379,615	468,062	0	300,000	57,968	1,167,013	17,684,931
June 30, 2042	17,684,931	398,291	505,102	0	300,000	51,440	1,246,799	18,876,359
June 30, 2043	18,876,359	396,849	524,822	0	300,000	43,664	1,330,407	20,122,457
June 30, 2044	20,122,457	389,283	535,696	0	300,000	37,235	1,417,909	21,431,188
June 30, 2045	21,431,188	398,480	565,933	0	300,000	31,825	1,509,857	22,805,417
June 30, 2046	22,805,417	398,749	588,923	0	300,000	26,905	1,606,432	24,248,580
June 30, 2047	24,248,580	386,247	597,168	0	300,000	22,092	1,707,864	25,767,615
June 30, 2048	25,767,615	388,204	621,845	0	300,000	18,241	1,814,671	27,366,886
June 30, 2049	27,366,886	394,896	654,598	0	300,000	11,263	1,927,018	29,045,465
June 30, 2050	29,045,465	363,755	651,948	0	300,000	7,816	2,045,071	30,810,159
June 30, 2051	30,810,159	359,922	678,908	0	300,000	5,474	2,169,225	32,665,872
June 30, 2052	32,665,872	358,467	711,766	0	300,000	3,703	2,299,806	34,616,082
June 30, 2053	34,616,082	331,401	721,598	0	300,000	2,317	2,437,052	36,665,254
June 30, 2054	36,665,254	323,816	750,720	0	300,000	1,776	2,581,295	38,821,421
June 30, 2055	38,821,421	319,304	786,428	0	300,000	1,300	2,733,073	41,088,670
June 30, 2056	41,088,670	314,530	823,801	0	300,000	322	2,892,654	43,472,375
June 30, 2057	43,472,375	309,200	861,833	0	300,000	0	3,060,455	45,980,197
June 30, 2058	45,980,197	303,596	902,670	0	300,000	0	3,237,006	48,618,129

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

FIDUCIARY POSITION PROJECTION DISCLOSURES (CONTINUED)

Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2017 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Portion of Employer Contributions for Current Plan Members	III. Total Benefit Payments	IV. Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Investment Earnings	VIII. Ending Fiduciary Net Position for Current Plan Members
June 30, 2059	48,618,129	297,753	946,321	0	300,000	0	3,422,716	48,320,376
June 30, 2060	48,320,376	291,639	992,394	0	300,000	0	3,401,754	48,028,737
June 30, 2061	48,028,737	285,263	1,041,721	0	300,000	0	3,381,223	47,743,474
June 30, 2062	47,743,474	278,623	1,094,414	0	300,000	0	3,361,141	47,464,851
June 30, 2063	47,464,851	271,672	1,150,074	0	300,000	0	3,341,526	47,193,179
June 30, 2064	47,193,179	264,315	1,207,800	0	300,000	0	3,322,400	46,928,864
June 30, 2065	46,928,864	256,477	1,269,055	0	300,000	0	3,303,792	46,672,387
June 30, 2066	46,672,387	248,100	1,332,773	0	300,000	0	3,285,736	46,424,287
June 30, 2067	46,424,287	239,055	1,398,534	0	300,000	0	3,268,270	46,185,232
June 30, 2068	46,185,232	230,113	1,468,227	0	300,000	0	3,251,440	45,955,119
June 30, 2069	45,955,119	222,443	1,542,944	0	300,000	0	3,235,240	45,732,676
June 30, 2070	45,732,676	213,776	1,620,518	0	300,000	0	3,219,580	45,518,900
June 30, 2071	45,518,900	204,177	1,701,353	0	300,000	0	3,204,531	45,314,723
June 30, 2072	45,314,723	193,720	1,785,800	0	300,000	0	3,190,156	45,121,003
June 30, 2073	45,121,003	182,481	1,873,512	0	300,000	0	3,176,519	44,938,522
June 30, 2074	44,938,522	170,544	1,964,837	0	300,000	0	3,163,672	44,767,978
June 30, 2075	44,767,978	158,105	2,060,847	0	300,000	0	3,151,666	44,609,873
June 30, 2076	44,609,873	145,204	2,160,829	0	300,000	0	3,140,535	44,464,669
June 30, 2077	44,464,669	132,191	2,265,791	0	300,000	0	3,130,313	44,332,478
June 30, 2078	44,332,478	119,170	2,376,534	0	300,000	0	3,121,006	44,213,308
June 30, 2079	44,213,308	106,312	2,493,009	0	300,000	0	3,112,617	44,106,996
June 30, 2080	44,106,996	93,669	2,615,806	0	300,000	0	3,105,133	44,013,327
June 30, 2081	44,013,327	81,579	2,745,594	0	300,000	0	3,098,538	43,931,748
June 30, 2082	43,931,748	70,064	2,882,840	0	300,000	0	3,092,795	43,861,684
June 30, 2083	43,861,684	59,339	3,027,997	0	300,000	0	3,087,863	43,802,345
June 30, 2084	43,802,345	49,702	3,181,820	0	300,000	0	3,083,685	43,752,643
June 30, 2085	43,752,643	40,975	3,344,599	0	300,000	0	3,080,186	43,711,668
June 30, 2086	43,711,668	33,375	3,516,936	0	300,000	0	3,077,301	43,678,293
June 30, 2087	43,678,293	26,818	3,699,265	0	300,000	0	3,074,952	43,651,475
June 30, 2088	43,651,475	21,280	3,891,964	0	300,000	0	3,073,064	43,630,195
June 30, 2089	43,630,195	16,668	4,095,510	0	300,000	0	3,071,566	43,613,527
June 30, 2090	43,613,527	12,909	4,310,371	0	300,000	0	3,070,392	43,600,618
June 30, 2091	43,600,618	9,869	4,537,013	0	300,000	0	3,069,484	43,590,749
June 30, 2092	43,590,749	7,412	4,775,898	0	300,000	0	3,068,789	43,583,337
June 30, 2093	43,583,337	5,507	5,027,637	0	300,000	0	3,068,267	43,577,830

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

BENEFIT PAYMENT PROJECTION DISCLOSURES

Actuarial Present Values of Projected Benefit Payments using a July 1, 2017 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit Payments	III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments	V. Present Value of Funded Benefit Payments	VI. Present Value of Unfunded Benefit Payments	VII. Present Value of Benefit Payments using Single Equivalent Discount Rate
June 30, 2019	1,973,084	126,128	126,128	0	126,128	0	126,128
June 30, 2020	2,084,690	139,833	139,833	0	130,636	0	130,636
June 30, 2021	2,514,269	160,457	160,457	0	140,045	0	140,045
June 30, 2022	2,964,712	171,300	171,300	0	139,675	0	139,675
June 30, 2023	3,427,603	179,960	179,960	0	137,086	0	137,086
June 30, 2024	3,901,919	191,617	191,617	0	136,365	0	136,365
June 30, 2025	4,395,480	196,304	196,304	0	130,513	0	130,513
June 30, 2026	4,914,595	207,645	207,645	0	128,973	0	128,973
June 30, 2027	5,459,207	215,539	215,539	0	125,071	0	125,071
June 30, 2028	6,029,533	218,000	218,000	0	118,179	0	118,179
June 30, 2029	6,625,570	224,967	224,967	0	113,935	0	113,935
June 30, 2030	7,243,376	236,587	236,587	0	111,940	0	111,940
June 30, 2031	7,893,263	256,342	256,342	0	113,310	0	113,310
June 30, 2032	8,576,233	266,061	266,061	0	109,871	0	109,871
June 30, 2033	9,292,004	282,704	282,704	0	109,065	0	109,065
June 30, 2034	10,044,569	307,697	307,697	0	110,900	0	110,900
June 30, 2035	10,834,719	325,472	325,472	0	109,591	0	109,591
June 30, 2036	11,666,098	343,008	343,008	0	107,900	0	107,900
June 30, 2037	12,541,078	353,284	353,284	0	103,823	0	103,823
June 30, 2038	13,463,869	362,162	362,162	0	99,432	0	99,432
June 30, 2039	14,438,122	366,298	366,298	0	93,953	0	93,953
June 30, 2040	15,465,836	373,804	373,804	0	89,573	0	89,573
June 30, 2041	16,548,397	379,615	379,615	0	84,982	0	84,982
June 30, 2042	17,684,931	398,291	398,291	0	83,299	0	83,299
June 30, 2043	18,876,359	396,849	396,849	0	77,539	0	77,539
June 30, 2044	20,122,457	389,283	389,283	0	71,058	0	71,058
June 30, 2045	21,431,188	398,480	398,480	0	67,953	0	67,953
June 30, 2046	22,805,417	398,749	398,749	0	63,526	0	63,526
June 30, 2047	24,248,580	386,247	386,247	0	57,488	0	57,488
June 30, 2048	25,767,615	388,204	388,204	0	53,979	0	53,979
June 30, 2049	27,366,886	394,896	394,896	0	51,298	0	51,298
June 30, 2050	29,045,465	363,755	363,755	0	44,145	0	44,145
June 30, 2051	30,810,159	359,922	359,922	0	40,807	0	40,807
June 30, 2052	32,665,872	358,467	358,467	0	37,969	0	37,969
June 30, 2053	34,616,082	331,401	331,401	0	32,793	0	32,793
June 30, 2054	36,665,254	323,816	323,816	0	29,935	0	29,935
June 30, 2055	38,821,421	319,304	319,304	0	27,577	0	27,577
June 30, 2056	41,088,670	314,530	314,530	0	25,378	0	25,378
June 30, 2057	43,472,375	309,200	309,200	0	23,307	0	23,307
June 30, 2058	45,980,197	303,596	303,596	0	21,380	0	21,380

APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

BENEFIT PAYMENT PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a July 1, 2017 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit Payments	III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments	V. Present Value of Funded Benefit Payments	VI. Present Value of Unfunded Benefit Payments	VII. Present Value of Benefit Payments using Single Equivalent Discount Rate
June 30, 2059	48,618,129	297,753	297,753	0	19,589	0	19,589
June 30, 2060	48,320,376	291,639	291,639	0	17,925	0	17,925
June 30, 2061	48,028,737	285,263	285,263	0	16,380	0	16,380
June 30, 2062	47,743,474	278,623	278,623	0	14,946	0	14,946
June 30, 2063	47,464,851	271,672	271,672	0	13,615	0	13,615
June 30, 2064	47,193,179	264,315	264,315	0	12,375	0	12,375
June 30, 2065	46,928,864	256,477	256,477	0	11,218	0	11,218
June 30, 2066	46,672,387	248,100	248,100	0	10,138	0	10,138
June 30, 2067	46,424,287	239,055	239,055	0	9,126	0	9,126
June 30, 2068	46,185,232	230,113	230,113	0	8,207	0	8,207
June 30, 2069	45,955,119	222,443	222,443	0	7,412	0	7,412
June 30, 2070	45,732,676	213,776	213,776	0	6,654	0	6,654
June 30, 2071	45,518,900	204,177	204,177	0	5,938	0	5,938
June 30, 2072	45,314,723	193,720	193,720	0	5,263	0	5,263
June 30, 2073	45,121,003	182,481	182,481	0	4,632	0	4,632
June 30, 2074	44,938,522	170,544	170,544	0	4,044	0	4,044
June 30, 2075	44,767,978	158,105	158,105	0	3,502	0	3,502
June 30, 2076	44,609,873	145,204	145,204	0	3,005	0	3,005
June 30, 2077	44,464,669	132,191	132,191	0	2,556	0	2,556
June 30, 2078	44,332,478	119,170	119,170	0	2,153	0	2,153
June 30, 2079	44,213,308	106,312	106,312	0	1,794	0	1,794
June 30, 2080	44,106,996	93,669	93,669	0	1,477	0	1,477
June 30, 2081	44,013,327	81,579	81,579	0	1,201	0	1,201
June 30, 2082	43,931,748	70,064	70,064	0	964	0	964
June 30, 2083	43,861,684	59,339	59,339	0	763	0	763
June 30, 2084	43,802,345	49,702	49,702	0	597	0	597
June 30, 2085	43,752,643	40,975	40,975	0	460	0	460
June 30, 2086	43,711,668	33,375	33,375	0	350	0	350
June 30, 2087	43,678,293	26,818	26,818	0	263	0	263
June 30, 2088	43,651,475	21,280	21,280	0	195	0	195
June 30, 2089	43,630,195	16,668	16,668	0	142	0	142
June 30, 2090	43,613,527	12,909	12,909	0	103	0	103
June 30, 2091	43,600,618	9,869	9,869	0	74	0	74
June 30, 2092	43,590,749	7,412	7,412	0	52	0	52
June 30, 2093	43,583,337	5,507	5,507	0	36	0	36

APPENDIX II – PLAN PROVISIONSEffective Date

GASB 45 was adopted July 1, 2008

GASB 74 was adopted for the fiscal year ending June 30, 2017

GASB 75 was adopted for the fiscal year ending June 30, 2018

Plan Year

July 1 through June 30.

Premium Effective Date

Medicare Supplement Plans: effective January 1, 2018

Non-Medicare Plans: effective July 1, 2017

Dental Plans: N/A

Creditable Service

Elapsed time from date of hire to termination of service date.

Benefits Offered

Comprehensive Medical Insurance offered through Harvard Pilgrim, Tufts Health Plan & Fallon Insurance and \$2,000 of Group Term Life Insurance.

Excise Tax

Under the Patient Protection and Affordable Care Act (“PPACA”), a 40% tax will be imposed on the cost of medical benefits in excess of a specified threshold.

Medicare Part B

The Town does not reimburse Medicare Part B.

The Town does not reimburse Medicare Part B Penalties.

Surviving Spouse Coverage

Spousal benefits do not change after the death of a plan participant.

APPENDIX II – PLAN PROVISIONS

Eligibility

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

Participant Contributions

Group	Individual	Family
Medical	50%	50%
Dental	100%	100%
Life	50%	N/A

APPENDIX III - ACTUARIAL METHODS & ASSUMPTIONS

<u>Pre-Retirement Mortality</u>	RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
<u>Post-Retirement Mortality</u>	RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
<u>Disabled Mortality</u>	RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females
<u>Assumption Experience Study</u>	The actuarial assumptions used to calculate the actuarial accrued liability and the normal cost primarily reflect the latest experience studies of the Massachusetts PERAC issued in 2014 and their most recent analysis of retiree mortality during 2015 and 2016.
<u>Discount Rate</u>	7.00% per annum (previously 7.00%)
<u>Net Long Term Rate of Return</u>	7.04% (based on investment policy)
<u>Municipal Bond Rate</u>	2.79% as of June 30, 2019 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
<u>Actuarial Cost Method</u>	Individual Entry Age Normal
<u>Asset-Valuation Method</u>	Market Value of Assets as of the Measurement Date, June 30, 2019

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Excise Tax

The PPACA Excise tax is expected to take effect for tax years beginning after December 31, 2021. The projected 2022 threshold amounts are \$12,511 for single coverage and \$32,676 for family coverage. For qualified retirees and those engaged in high risk professions, a "kicker" amount of \$1,650 for single coverage and \$3,450 for family coverage is expected to be added to the above thresholds.

Employee Termination

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

Non-Public Safety Employees

	0-4 Years of Service (Males)	0-4 Years of Service (Females)	5-9 Years of Service (Males)	5-9 Years of Service (Females)	10+ Years of Service (Males)	10+ Years of Service (Females)
Age						
20	27.00%	27.00%	12.00%	12.00%	6.00%	6.00%
30	23.00%	23.00%	10.00%	10.00%	5.50%	5.50%
40	16.00%	16.00%	8.00%	8.00%	3.50%	3.50%
50	18.00%	18.00%	6.00%	6.00%	3.00%	3.00%
60	18.00%	18.00%	5.00%	5.00%	3.50%	3.50%

Public Safety Employees

Service	Public Safety Male	Public Safety Female
0	9.00%	9.00%
5	6.00%	6.00%
10	3.50%	3.50%
15	2.00%	2.00%
20	1.50%	1.50%
25	1.50%	1.50%
30	1.50%	1.50%

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Retirement Rates for Eligible Employees

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

In the absence of census data specifying which employees are teachers it was assumed that two thirds of school employees are teachers. If available, actual census data was used.

Permanent Disability Rates

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

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONSTrend Rate

Medicare Supplement Plans: Initial Trend of 5.00% for 2019 grading down 0.00% per year for an ultimate trend rate of 5.00%.

Non-Medicare Plans: Initial Trend of 5.00% for 2019 grading down 0.00% per year for an ultimate trend rate of 5.00%.

Dental Plans: N/A

Participation Rate

It was assumed that 80% of employees eligible to receive retirement benefits would enroll in the retiree medical plans upon retirement. For life insurance plans, it was assumed that 80% of eligible employees would elect coverage upon retirement.

Spouse Participation Rate

It was assumed that 80% of male employees and 70% of female employees who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement.

Spouse Demographics

It was assumed that a male spouse is three years older than a female spouse and same sex spouses were assumed to be the same age. For current retirees, the actual census information was used, if available.

Compensation Increases

3.00% per year.

Inflation Rate

2.75% per year.

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Implicit Subsidy

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

Impact of Implicit Subsidy		
	As of the Measurement Date	
Impact on Liability	<u>June 30, 2019</u>	<u>July 1, 2017</u>
I. Actuarial Accrued Liability	3,312,831	2,963,189
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>3,084,355</u>	<u>2,764,581</u>
III. Liability from Implicit Subsidy [I. - II.]	228,476	198,608

	For the Measurement Period Ending	
Impact on Payments	<u>June 30, 2019</u>	<u>July 1, 2017</u>
IV. Employer Payments (Including Implicit Subsidy)	126,128	100,568
V. Actual Employer Payments	<u>112,652</u>	<u>N/A</u>
VI. Implicit Subsidy [IV. - V.]	13,476	<u>N/A</u>

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

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

ANNUAL PER CAPITA CLAIMS

ACTIVE EMPLOYEES			RETIREE - NOT MEDICARE ELIGIBLE			RETIREE - MEDICARE ELIGIBLE		
Age Bracket	Female	Male	Age Bracket	Female	Male	Age Bracket	Female	Male
24 & Under	8,022	3,357	44 & Under	8,022	6,114	65 to 69	6,628	7,080
25 to 29	8,022	3,613	45 to 49	8,902	7,294	70 to 74	7,325	7,817
30 to 34	8,022	4,353	50 to 54	9,776	8,810	75 to 79	7,927	8,465
35 to 39	8,022	5,197	55 to 59	10,638	10,718	80 to 84	8,327	8,896
40 to 44	8,022	6,114	60 to 64	12,032	12,852	85 to 89	8,755	9,351
45 to 49	8,902	7,294	65 to 69	13,255	14,160	90 & Over	9,202	9,828
50 to 54	9,776	8,810	70 to 74	14,649	15,633			
55 to 59	10,638	10,718	75 to 79	15,854	16,930			
60 to 64	12,032	12,852	80 to 84	16,655	17,792			
65 to 69	13,255	14,160	85 to 89	17,510	18,703			
70 & Over	14,649	15,633	90 & Over	18,403	19,657			

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Open Group Forecast

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

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

Additional Comments

The liabilities being reported as of the Measurement Date of June 30, 2019 reflect a closed group and do not reflect any new entrants after the valuation date.

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

APPENDIX IV – PLAN DEMOGRAPHICS

Active Employees

Valuation Date	July 1, 2017
A. Average Age at Hire	36.87
B. Average Service	<u>14.60</u>
C. Average Current Age	51.47

Retired Employees & Spouses

Valuation Date	July 1, 2017
A. Under Age 65	3
B. Age 65 & Over	<u>28</u>
C. Total	31

Average Service Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-24										
25-29										
30-34	1	1	1							3
35-39	2	2	2		1					7
40-44		1	1	1	1					4
45-49	1		1	1		1				4
50-54	2	2		1			1			6
55-59	3		2	2	2		1	1		11
60-64	1		1	1			1	2		6
65-69		1	1	1						3
70+								1		1
Total	10	7	9	7	4	1	3	4		45

APPENDIX IV – PLAN DEMOGRAPHICS

Plan Offerings

Number of Contracts

	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
Fallon Select	2		6	8
Harvard Pilgrim HMO	6		17	23
Tufts HMO	4		10	14
Tufts Medicare Supplement	13			13
Tufts Medicare Preferred	5			5
Fallon Senior	6			6
Total	36	0	33	69

Per Contract Costs (monthly)

	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Fallon Select	586.00		1,565.00
Harvard Pilgrim HMO	797.00		2,095.00
Tufts HMO	776.00		2,108.00
Tufts Medicare Supplement	430.00	860.00	
Tufts Medicare Preferred	314.00	628.00	
Fallon Senior	394.00	788.00	
Dental Plan	N/A		N/A

APPENDIX V - OVERVIEW OF GASB 74 & 75

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

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

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

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

APPENDIX V – OVERVIEW OF GASB 74 & 75

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

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

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

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

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

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

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

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

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

GLOSSARY

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

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

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

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

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

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

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

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

GLOSSARY

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

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

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

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

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

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

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

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

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