

**Town of Wenham Other
Postemployment Benefits Plan**

GASB 74/75 Actuarial Valuation

With a Valuation Date of June 30, 2017

& a Measurement Date of June 30, 2017

For the Reporting Dates of

June 30, 2018

June 30, 2019

Delivered April 2018

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April 25, 2018

Personal and Confidential

Mr. Christopher Holak
Town Accountant
Town of Wenham
138 Main Street
Wenham, MA 01984

Dear Mr. Holak:

We have performed an actuarial valuation of the Town of Wenham Other Postemployment Benefits Plan for the Reporting Date & fiscal year ending June 30, 2018 with a Measurement Date of June 30, 2017 and a Valuation Date of June 30, 2017. The figures presented in this report reflect the adoption, by the Town of Wenham, of Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75") effective for the fiscal year 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 refer you to Section I of this report for a detailed summary and commentary on the results of the valuation and a comparison with the prior valuation. Section II is a summary of the plan provisions, and Section III describes the actuarial cost method and assumptions. Details for cost calculations, supporting data, and disclosures are provided in Exhibits A through C.

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

April 25, 2018

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Wenham other postemployment benefit programs with a Valuation Date of June 30, 2017 with a Measurement Date of June 30, 2017 for the Reporting Date & fiscal year ending June 30, 2018 in accordance with generally accepted actuarial principles and practices. 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.

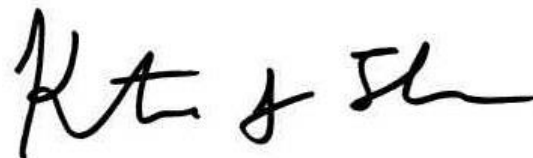
The actuarial data is based on the plan of benefits verified by the Town and on participant claims or premium data provided by the Town and/or vendors employed by the Town.

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.



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



Kurtis J. Thompson, ASA, MAAA
Consulting Actuary

Executive Summary

GASB 74 and 75 Impact

The Town adopted GASB 74 for the fiscal year ending June 30, 2017 and GASB 75 for the fiscal year ending June 30, 2018. The adoption of GASB 74/75 introduces a new actuarial cost method and discount rate as well as new disclosures and methodologies for reporting plan liabilities and OPEB expenses. Significant changes have been made to the recognition of OPEB expenses, which makes the comparison of Net OPEB Expense in the current valuation to the expenses reported under GASB 45 misleading. The liability reported on the Town's balance sheet is likely to increase dramatically as GASB 74/75 require the recognition of liabilities immediately rather than over a 30 year period as GASB 45 allowed.

What caused plan liabilities to change from FY 16 to FY 18?

Plan experience was in line with expectation - for the year ending on the Measurement Date of June 30, 2017, the Plan saw an experience loss of \$118,520 or 2.68%. This was mainly due to the addition of actives with service who were not reflected on the prior valuation. This was mostly offset by premiums increasing by less than the expected to increase 10% increase over the two-year period. The actuarial experience loss is amortized into the net OPEB expense over time until fully recognized. Changes in assumptions decreased disclosed liabilities by \$1 million.

Over the two year period, the Total OPEB Liability ("TOL") went from \$5,059,967 as of June 30, 2015 to \$4,845,052 as of June 30, 2017 for a decrease of \$214,915. The Net OPEB Expense was \$234,960 for the fiscal year June 30, 2018. As this is the first year using GASB 75 methodology, there is no baseline for comparison. For a projection of future costs and liabilities refer to Exhibit D.

Executive Summary

(continued)

Assumption changes

A key assumption has changed since the prior valuation - the impact is detailed below.

- ✓ Due to the GASB 75 standards the discount rate was changed from 4.00% to 5.25% decreasing the disclosed liability by \$1 million.
- ✓ Assumption changes caused Normal Cost to decrease by \$80 thousand.

It is important to remember that actuarial assumptions or changes in such do not impact the actual cost of the Plan. Rather, they impact the timing of the recognition of such costs.

Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare Integrated) plans - represent 76% 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 5.0% per year
- ✓ Discount Rate (5.25%) – Higher discount rates yield lower liabilities and vice versa
- ✓ Cost Sharing - Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance.

Executive Summary
(continued)

What is Implicit Subsidy? How does it impact us?

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.

Impact of Implicit Subsidy		
Impact on Liability	As Of The Measurement Date	
	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Actuarial Accrued Liability	4,845,052	5,059,967
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>4,575,710</u>	<u>N/A</u>
III. Liability from Implicit Subsidy [I. - II.]	269,342	N/A

Impact on Payments	For The Fiscal Year Ending	
	<u>June 30, 2018</u>	<u>June 30, 2016</u>
IV. Employer Payments (Including Implicit Subsidy)	171,732	159,749
V. Actual Employer Payments	<u>N/A</u>	<u>N/A</u>
VI. Implicit Subsidy [IV. - V.]	N/A	N/A

Executive Summary
(continued)

What are some 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

	<u>June 30, 2017</u>	<u>June 30, 2015</u>
Total OPEB Liability	4,845,052	5,059,967
Per Eligible Active Plan Participant	64,449	67,256
Per Retiree/Spouse Plan Participant	62,618	76,443
Total Annual Service Cost (annual benefit accrual)	190,103	256,883
Per Eligible Active Plan Participant	4,045	6,422
Expected Employer Share of Retiree Costs	171,732	159,749
Per Retiree/Spouse Plan Participant	5,922	5,153
Net OPEB Liability as a % of Payroll	165.00%	136.10%
Average Annual Medical Plan Premium (Single Coverage)	7,930	6,861
Average Annual Medical Plan Premium (Family Coverage)	19,565	18,853
<u>Projected 2020 Excise Tax Thresholds</u>		
Annual Medical Plan Premium (Single Coverage)	12,511	
Annual Medical Plan Premium (Family Coverage)	32,676	

Executive Summary
(continued)

Liabilities & Benefit Payments in today’s dollars

With the growth of medical care costs over time, the nominal accrued liabilities (“TOL”) and benefit payments can appear daunting. However, it is important to remember that a dollar paid in the future is worth less than a dollar paid today.

Measurement Date	Number of Retirees, Spouses & Surviving Spouses	Present Value at 3.00% of Total OPEB Liability	Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"
June 30, 2017	29	4,845,052	171,732
June 30, 2022	35	5,580,427	167,713
June 30, 2027	42	6,177,547	223,592
June 30, 2032	46	6,708,747	271,460
June 30, 2037	47	7,234,290	270,085
June 30, 2042	47	7,862,221	303,400
June 30, 2047	48	8,481,119	351,381

A full projection of plan costs and liabilities in today’s dollars is shown in Exhibit E of this report.

We have an “unfunded liability”. How do we fund it? Can we fund it?

If you’re looking to fund your OPEB liability, there are a variety of manner to do so. The amount of funding in combination with your Investment Policy will impact the discount rate and disclosed liabilities. Below are a few sample funding options, but it’s important to develop a funding policy that fits your organization as each situation is different.

	Partial Funding	Full Funding Level Dollar	Full Funding increasing at 3.00% per year
Net OPEB Liability	\$4,778,985	\$4,006,202	\$4,006,202
Required Trust Contribution	\$20,000	\$204,700	\$152,000
Discount Rate	5.25%	6.50%	6.50%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

**Town of Wenham
Assuming Partial Funding - 5.25% discount rate
Comparison of Plan Liabilities to Prior Valuation**

	As of the Measurement Date	
	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Present Value of Future Benefits		
A. Actives	4,686,689	5,691,927
B. Retirees/Disabled	<u>1,815,935</u>	<u>2,369,731</u>
C. Total	6,502,624	8,061,658
II. Present Value of Future Normal Cost	1,657,572	3,001,691
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	3,029,117	2,690,236
B. Retirees/Disabled	<u>1,815,935</u>	<u>2,369,731</u>
C. Total	4,845,052	5,059,967
IV. Fiduciary Net Position [Plan Assets]	66,067	25,371
V. Net OPEB Liability (Asset) [III. - IV.]	4,778,985	5,034,596
VI. Funded Ratio [IV. / III.]	1.36%	0.50%
VII. Annual Covered Payroll	2,896,297	3,698,986
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	165.0%	136.1%
IX. Number of Eligible Participants		
A. Actives	47	40
B. Retirees/Disabled	<u>29</u>	<u>31</u>
C. Total	76	71
	<u>June 30, 2018</u>	<u>June 30, 2016</u>
X. Service Cost	190,103	256,883
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	240,103	N/A
XII. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	N/A
XIII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	0	N/A
XIV. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	N/A
XV. Projected Earnings on OPEB Plan Investments	(3,514)	N/A
XVI. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	<u>0</u>	<u>N/A</u>
XVII. Financial Statement Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.]	426,692	N/A
XVII. Employer Share of Costs	(171,732)	(159,749)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(20,000)	(20,000)
XIX. Total Employer Contribution [XVII. + XVIII.]	(191,732)	(179,749)
XX. Other Changes	<u>0</u>	<u>N/A</u>
XXI. Net OPEB Expense [XVII.+XIX.+XX.]	234,960	N/A
XXII. Discount Rate	5.25%	4.00%

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Wenham
Comparison of Plan Funding vs. Partial Funding

As of the June 30, 2017 Measurement Date

	<u>Partial Funding - 5.25%</u> <u>discount rate</u>	<u>Funding - 6.50%</u> <u>discount rate</u>
I. Present Value of Future Benefits		
A. Actives	4,686,689	3,499,738
B. Retirees/Disabled	<u>1,815,935</u>	<u>1,662,652</u>
C. Total	6,502,624	5,162,390
II. Present Value of Future Normal Cost	1,657,572	1,090,121
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	3,029,117	2,409,617
B. Retirees/Disabled	<u>1,815,935</u>	<u>1,662,652</u>
C. Total	4,845,052	4,072,269
IV. Fiduciary Net Position [Plan Assets]	66,067	66,067
V. Net OPEB Liability (Asset) [III. - IV.]	4,778,985	4,006,202
VI. Funded Ratio [IV. / III.]	1.36%	1.62%
VII. Annual Covered Payroll	2,896,297	2,896,297
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	165.0%	138.3%
IX. Number of Eligible Participants		
A. Actives	47	47
B. Retirees/Disabled	<u>29</u>	<u>29</u>
C. Total	76	76
 For the Reporting Date and Fiscal Year Ending June 30, 2018		
X. Service Cost	190,103	140,996
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	240,103	247,773
XII. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0
XIII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0
XIV. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0
XV. Projected Earnings on OPEB Plan Investments	(3,514)	(10,562)
XVI. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	<u>0</u>	<u>0</u>
XVII. Financial Statement Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.]	426,692	378,207
XVIII. Employer Share of Costs	(171,732)	(171,732)
XIX. Employer (Payments)/Withdrawals to/from OPEB Trust	(20,000)	(204,700)
XX. Total Employer Contribution [XVIII. + XIX.]	(191,732)	(376,432)
XXI. Other Changes	0	0
XXII. Net OPEB Expense [XVII.+XX.+XXI.]	234,960	1,775

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Wenham
Assuming Partial Funding - 5.25% discount rate
Plan Liabilities as of the June 30, 2017 Measurement Date

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	4,649,754	0	20,377	16,558	4,686,689
B. Retirees/Disabled	<u>1,794,025</u>	<u>0</u>	<u>21,880</u>	<u>30</u>	<u>1,815,935</u>
C. Total	6,443,779	0	42,257	16,588	6,502,624
II. Present Value of Future Normal Cost	1,641,479	0	5,961	10,132	1,657,572
III. Total OPEB Liability					
A. Actives	3,008,275	0	14,416	6,426	3,029,117
B. Retirees/Disabled	<u>1,794,025</u>	<u>0</u>	<u>21,880</u>	<u>30</u>	<u>1,815,935</u>
C. Total	4,802,300	0	36,296	6,456	4,845,052
IV. Fiduciary Net Position [Plan Assets]	65,484	0	495	88	66,067
V. Net OPEB Liability (Asset) [III. - IV.]	4,736,816	0	35,801	6,368	4,778,985
VI. Annual Covered Payroll	2,896,297	2,896,297	2,896,297	2,896,297	2,896,297
VII. Net OPEB Liability (Asset) as % of Covered Payroll	163.5%	0.0%	1.2%	0.2%	165.0%
VIII. Number of Eligible Participants					
IX. A. Actives	47	47	47	47	
B. Retirees/Disabled	<u>29</u>	<u>0</u>	<u>12</u>	<u>29</u>	
C. Total	76	47	59	76	
For the Reporting Date and Fiscal Year Ending June 30, 2018					
X. Service Cost	188,409	0	839	855	190,103
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	237,987	0	1,763	353	240,103
XII. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XIII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0	0	0	0
XIV. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0
XV. Projected Earnings on OPEB Plan Investments	(3,514)	0	0	0	(3,514)
XVI. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
XVII. Financial Statement Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.]	422,882	0	2,602	1,208	426,692
XVIII. Employer Share of Costs	(170,019)	0	(1,713)	0	(171,732)
XIX. Employer (Payments)/Withdrawals to/from OPEB Trust	(19,868)	0	(111)	(21)	(20,000)
XX. Total Employer Contribution [XVIII. + XIX.]	(189,887)	0	(1,824)	(21)	(191,732)
XXI. Other Changes	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
XXII. Net OPEB Expense [XVII.+XX.+XXI.]	232,995	0	778	1,187	234,960

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)
Town of Wenham
Plan Liabilities as of the June 30, 2017 Measurement Date
Assuming Partial Funding

	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Highway Employees and Retirees	Library Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits							
A. Actives	665,420	1,626,173	540,342	761,151	697,981	395,622	4,686,689
B. Retirees/Disabled	<u>478,793</u>	<u>808,732</u>	<u>76,032</u>	<u>120,745</u>	<u>206,860</u>	<u>124,773</u>	<u>1,815,935</u>
C. Total	1,144,213	2,434,905	616,374	881,896	904,841	520,395	6,502,624
II. Present Value of Future Normal Cost	451,223	569,442	109,944	255,718	209,971	61,274	1,657,572
III. Total OPEB Liability							
A. Actives	214,197	1,056,731	430,398	505,433	488,010	334,348	3,029,117
B. Retirees/Disabled	<u>478,793</u>	<u>808,732</u>	<u>76,032</u>	<u>120,745</u>	<u>206,860</u>	<u>124,773</u>	<u>1,815,935</u>
C. Total	692,990	1,865,463	506,430	626,178	694,870	459,121	4,845,052
IV. Fiduciary Net Position [Plan Assets]	9,445	25,446	6,949	8,526	9,437	6,264	66,067
V. Net OPEB Liability (Asset) [III. - IV.]	683,545	1,840,017	499,481	617,652	685,433	452,857	4,778,985
VI. Annual Covered Payroll	673,961	829,973	240,074	497,725	452,616	201,948	2,896,297
VII. Net OPEB Liability (Asset) as % of Covered Payroll	101.4%	221.7%	208.1%	124.1%	151.4%	224.2%	165.0%
VIII. Number of Eligible Participants							
A. Actives	14	11	3	8	8	3	47
B. Retirees/Disabled	<u>11</u>	<u>8</u>	<u>2</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>29</u>
C. Total	25	19	5	11	11	5	76
For the Reporting Date and Fiscal Year Ending June 30, 2018							
IX. Service Cost	59,814	52,579	12,725	34,555	23,769	6,661	190,103
X. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	27,428	95,144	25,875	32,781	35,713	23,162	240,103
XI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0	0	0
XII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0	0	0	0	0	0
XIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0	0	0
XIV. Projected Earnings on OPEB Plan Investments	(505)	(1,351)	(369)	(455)	(502)	(332)	(3,514)
XV. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	0	0	0	0	0	0	0
XVI. Financial Statement Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.]	86,737	146,372	38,231	66,881	58,980	29,491	426,692
XVII. Employer Share of Costs	(41,564)	(63,865)	(11,648)	(20,742)	(20,654)	(13,259)	(171,732)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(2,935)	(7,626)	(2,083)	(2,629)	(2,867)	(1,860)	(20,000)
XIX. Total Employer Contribution [XVII. + XVIII.]	(44,499)	(71,491)	(13,731)	(23,371)	(23,521)	(15,119)	(191,732)
XX. Other Changes	0	0	0	0	0	0	0
XXI. Net OPEB Expense [XVI.+XIX.+XX.]	42,238	74,881	24,500	43,510	35,459	14,372	234,960

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Wenham

Detail of Plan Liabilities by Group and Dependency Status

Assuming Partial Funding - 5.25% discount rate

Plan Liabilities as of the June 30, 2017 Measurement Date

	<u>Present Value of Future Benefits</u>	<u>Total OPEB Liability (Individual Entry Age Normal)</u>	<u>Service Cost</u>
Actives			
Under Age 65			
A. Participants	784,306	494,190	25,994
B. Spouses	<u>764,431</u>	<u>487,591</u>	<u>25,218</u>
C. Total	1,548,737	981,781	51,212
Age 65 and Over			
A. Participants	1,679,986	1,152,692	79,811
B. Spouses	<u>1,457,966</u>	<u>894,644</u>	<u>59,080</u>
C. Total	3,137,952	2,047,336	138,891
Actives Total			
A. Participants	2,464,292	1,646,882	105,805
B. Spouses	<u>2,222,397</u>	<u>1,382,235</u>	<u>84,298</u>
C. Total	4,686,689	3,029,117	190,103
Retirees/Disabled			
Under Age 65			
A. Participants	119,484	119,484	0
B. Spouses	<u>66,435</u>	<u>66,435</u>	<u>0</u>
C. Total	185,919	185,919	0
Age 65 and Over			
A. Participants	1,173,704	1,173,704	0
B. Spouses	<u>456,312</u>	<u>456,312</u>	<u>0</u>
C. Total	1,630,016	1,630,016	0
Retirees/Disabled Total			
A. Participants	1,293,188	1,293,188	0
B. Spouses	<u>522,747</u>	<u>522,747</u>	<u>0</u>
C. Total	1,815,935	1,815,935	0
Total Population			
A. Participants	3,757,480	2,940,070	105,805
B. Spouses	<u>2,745,144</u>	<u>1,904,982</u>	<u>84,298</u>
C. Total	6,502,624	4,845,052	190,103

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Wenham
Assuming Funding over 30 years at 6.50% discount rate
Plan Liabilities as of the June 30, 2017 Measurement Date

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	3,476,189	0	14,748	8,801	3,499,738
B. Retirees/Disabled	<u>1,642,403</u>	<u>0</u>	<u>20,233</u>	<u>16</u>	<u>1,662,652</u>
C. Total	5,118,592	0	34,981	8,817	5,162,390
II. Present Value of Future Normal Cost	1,080,908	0	4,313	4,900	1,090,121
III. Total OPEB Liability (Individual Entry Age Normal)					
A. Actives	2,395,281	0	10,435	3,901	2,409,617
B. Retirees/Disabled	<u>1,642,403</u>	<u>0</u>	<u>20,233</u>	<u>16</u>	<u>1,662,652</u>
C. Total	4,037,684	0	30,668	3,917	4,072,269
IV. Fiduciary Net Position [Plan Assets]	65,505	0	498	64	66,067
V. Net OPEB Liability (Asset) [III. - IV.]	3,972,179	0	30,170	3,853	4,006,202
VI. Annual Covered Payroll	2,896,297	2,896,297	2,896,297	2,896,297	2,896,297
VII. Net OPEB Liability (Asset) as % of Covered Payroll	137.1%	0.0%	1.0%	0.1%	138.3%
VIII. Number of Eligible Participants					
A. Actives	47	47	47	47	
B. Retirees/Disabled	<u>29</u>	<u>0</u>	<u>12</u>	<u>29</u>	
C. Total	76	47	59	76	
For the Reporting Date and Fiscal Year Ending June 30, 2018					
IX. Service Cost	139,740	0	622	634	140,996
X. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	245,669	0	1,866	238	247,773
XI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0	0	0	0
XIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0
XIV. Projected Earnings on OPEB Plan Investments	(10,472)	0	(80)	(10)	(10,562)
XV. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
XVI. Financial Statement Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.]	374,937	0	2,408	862	378,207
XVII. Employer Share of Costs	(170,019)	0	(1,713)	0	(171,732)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(202,961)	0	(1,542)	(197)	(204,700)
XIX. Total Employer Contribution [XVII. + XVIII.]	(372,980)	0	(3,255)	(197)	(376,432)
XX. Other Changes	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
XXI. Net OPEB Expense [XVI.+XIX.+XX.]	1,957	0	(847)	665	1,775

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Wenham
Plan Liabilities as of the June 30, 2017 Measurement Date
Assuming Funding over 30 years at 6.50% discount rate

	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Highway Employees and Retirees	Library Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits							
A. Actives	496,896	1,214,328	403,495	568,382	521,210	295,427	3,499,738
B. Retirees/Disabled	<u>438,378</u>	<u>740,467</u>	<u>69,614</u>	<u>110,553</u>	<u>189,399</u>	<u>114,241</u>	<u>1,662,652</u>
C. Total	935,274	1,954,795	473,109	678,935	710,609	409,668	5,162,390
II. Present Value of Future Normal Cost	296,751	374,500	72,306	168,176	138,090	40,298	1,090,121
III. Total OPEB Liability							
A. Actives	170,390	840,614	342,375	402,064	388,205	265,969	2,409,617
B. Retirees/Disabled	<u>438,378</u>	<u>740,467</u>	<u>69,614</u>	<u>110,553</u>	<u>189,399</u>	<u>114,241</u>	<u>1,662,652</u>
C. Total	608,768	1,581,081	411,989	512,617	577,604	380,210	4,072,269
IV. Fiduciary Net Position [Plan Assets]	9,445	25,446	6,949	8,526	9,437	6,264	66,067
V. Net OPEB Liability (Asset) [III. - IV.]	599,323	1,555,635	405,040	504,091	568,167	373,946	4,006,202
VI. Annual Covered Payroll	673,961	829,973	240,074	497,725	452,616	201,948	2,896,297
VII. Net OPEB Liability (Asset) as % of Covered Payroll	88.9%	187.4%	168.7%	101.3%	125.5%	185.2%	138.3%
VIII. Number of Eligible Participants							
A. Actives	14	11	3	8	8	3	47
B. Retirees/Disabled	<u>11</u>	<u>8</u>	<u>2</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>29</u>
C. Total	25	19	5	11	11	5	76
For the Reporting Date and Fiscal Year Ending June 30, 2018							
IX. Service Cost	44,363	38,997	9,438	25,629	17,629	4,940	140,996
X. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	37,040	96,199	25,067	31,190	35,144	23,133	247,773
XI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0	0	0
XII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0	0	0	0	0	0
XIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0	0	0
XIV. Projected Earnings on OPEB Plan Investments	(1,510)	(4,068)	(1,111)	(1,363)	(1,509)	(1,001)	(10,562)
XV. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	0	0	0	0	0	0	0
XVI. Financial Statement Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.]	79,893	131,128	33,394	55,456	51,264	27,072	378,207
XVII. Employer Share of Costs	(41,564)	(63,865)	(11,648)	(20,742)	(20,654)	(13,259)	(171,732)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(30,601)	(79,476)	(20,709)	(25,768)	(29,034)	(19,112)	(204,700)
XIX. Total Employer Contribution [XVII. + XVIII.]	(72,165)	(143,341)	(32,357)	(46,510)	(49,688)	(32,371)	(376,432)
XX. Other Changes	0	0	0	0	0	0	0
XXI. Net OPEB Expense [XVI.+XIX.+XX.]	7,728	(12,213)	1,037	8,946	1,576	(5,299)	1,775

Overview of GASB 74 and 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 post-employment 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 post-employment benefits.

Overview of GASB 74 and 75

(continued)

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 post-employment benefits and when will they start?

Medical inflation and claims cost assumptions: When an employee starts receiving post-employment 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.

Commentary on Plan Experience and Contribution Amounts

1. GASB 74/75 – How we got here:

GASB 74 and 75 were designed to recognize the Other Postemployment Benefits (“OPEB”) earned by employees throughout their working career vs. when they are paid in retirement – accrual accounting vs. “pay-as-you-go” accounting while increasing disclosures to better reflect the plan’s liabilities and future funding requirements. 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. Additionally, GASB 74 and 75 require increased disclosures comparable to those required under GASB 67 and 68 and interest rates used in the valuation are more closely tied to the plan’s underlying investment and funding policy.

2. GASB 74 and 75 Impact

The Town has adopted GASB 74 for the fiscal year ending June 30, 2017 and GASB 75 for the fiscal year ending June 30, 2018. The adoption of GASB 74/75 introduces a new actuarial cost method and discount rate as well as new disclosures and methodologies for reporting plan liabilities and OPEB expenses. Significant changes have been made to the recognition of OPEB expenses, making the comparison of Net OPEB Expense in the current valuation to the expenses reported under GASB 45 misleading. The liability reported on the Town’s balance sheet will increase dramatically as GASB 74/75 require the recognition of liabilities immediately rather than recognizing liabilities (Net OPEB Obligation) over a 30 year period as GASB 45 allowed. Please keep these changes in mind when considering any comparison to previously reported liabilities and expenses.

Commentary on Plan Experience and Contribution Amounts
(continued)

3. **Balance Sheet Items as of the Measurement Date**

	June 30, 2017	June 30, 2015
Total OPEB Liability	\$4,845,052	\$5,059,967
Fiduciary Net Position	\$66,067	\$25,371
Net OPEB Liability	\$4,778,985	\$5,034,596
Funded Ratio	1.36%	0.50%

4. **Income Statement Items as of the Fiscal Year Ending**

	June 30, 2018	June 30, 2016
Service Cost	\$190,103	\$256,883
Interest Expense	\$240,103	N/A
Recognition of (Inflow)/Outflow from Plan Design Changes	\$0	N/A
Recognition of (Inflow)/Outflow from Plan Experience	\$0	N/A
Recognition of (Inflow)/Outflow from Changes in Assumptions	\$0	N/A
Projected Investment Earnings	\$(3,514)	N/A
Recognition of (Inflow)/Outflow from Earnings on Investments	\$0	N/A
Financial Statement Expense	426,692	N/A
Employer Share of Costs	\$(171,732)	\$(159,749)
Employer Payments (Withdrawals) to/from Trust	\$(20,000)	\$(20,000)
Total Employer Payments	\$(191,732)	\$(179,749)
Other Changes	\$0	N/A
Net OPEB Expense	\$234,960	N/A
Interest Rate	5.25%	4.00%

SECTION II

SUMMARY OF PLAN PROVISIONS

<u>Effective Date</u>	GASB 45 is adopted July 1, 2009 GASB 74 is adopted for the fiscal year ending June 30, 2017 GASB 75 is adopted for the fiscal year ending June 30, 2018
<u>Plan Year</u>	July 1 through June 30.
<u>Eligibility</u>	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Participant Contributions</u>	Retirees shall pay 25% of stated premiums for Medical and Life Insurance.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through the Group Insurance Commission ('GIC'), Dental Insurance and Group Term Life Insurance.
<u>Normal Retirement Date</u>	The normal retirement date is the first day of the month following a participant's 65th birthday.
<u>Early Retirement</u>	Early retirement is available for any participant who has attained benefit eligibility.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

A. ACTUARIAL COST METHOD

The actuarial cost method used to calculate the costs and liabilities of the plan is the Individual Entry Age Normal Actuarial Cost Method. Under this method, the annual normal 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 normal cost for each active member is a level percent of payroll. The actuarial accrued liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

Actuarial gains and losses are calculated each year and amortized into the OPEB expense. Gains and losses arising from plan design changes are recognized immediately. Gains and losses arising from differences between expected and actual investment returns are amortized over a five (5) year period. Gain and losses arising from differences between expected and actual plan experience and changes in actuarial assumptions are amortized over the remaining lifetime of all active and retired plan participants (5.54 years for the Town for the 2018 fiscal year).

All employees who are plan participants on the valuation date are included in the actuarial valuation.

B. ASSET VALUATION METHOD

The actuarial value of assets is equal to the Market Value of the Plan's assets as of the measurement date.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS

We used the following assumptions in this year's actuarial valuation:

Pre-Retirement Mortality

It is assumed that pre-retirement mortality is represented by the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females

Post-Retirement Mortality

It is assumed that post-retirement mortality is represented by the RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females

Disabled Mortality

It is assumed that disabled mortality is represented by the RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females

Mortality Experience Study

The mortality assumptions reflect PERAC's recent experience analysis published in 2014 (based on the years 2006-2011), updated to reflect data through January 1, 2015 for post-retirement mortality, and professional judgement. As such, mortality assumptions reflect observed current mortality as well as expected mortality improvements.

Discount Rate

5.25% per annum (previously 4.00%)

Long Term Rate of Return

6.33% (based on investment policy)

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Municipal Bond Rate

3.13% as of June 30, 2017 (source: S&P Municipal Bond 20-Year High Grade Index - SAPIHG)

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						
<u>Age</u>	<u>0-4 Years of Service (Males)</u>	<u>0-4 Years of Service (Females)</u>	<u>5-9 Years of Service (Males)</u>	<u>5-9 Years of Service (Females)</u>	<u>10+ Years of Service (Males)</u>	<u>10+ Years of Service (Females)</u>
	20	27.00%	27.00%	12.00%	12.00%	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		
<u>Service</u>	<u>Public Safety Male</u>	<u>Public Safety Female</u>
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%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Retirement Rates

It was assumed that the following percentage of eligible employees would retire each year:

<u>Age</u>	<u>Non Public Safety Male</u>	<u>Non Public Safety Female</u>	<u>Public Safety</u>
45	0.00%	0.00%	1.00%
46	0.00%	0.00%	1.00%
47	0.00%	0.00%	1.00%
48	0.00%	0.00%	1.00%
49	0.00%	0.00%	1.00%
50	1.00%	1.50%	2.00%
51	1.00%	1.50%	2.00%
52	1.00%	2.50%	2.00%
53	1.00%	2.50%	5.00%
54	2.00%	2.50%	7.50%
55	2.00%	5.50%	15.00%
56	2.50%	6.50%	10.00%
57	2.50%	6.50%	10.00%
58	5.00%	6.50%	10.00%
59	6.50%	6.50%	15.00%
60	12.00%	5.00%	20.00%
61	20.00%	13.00%	20.00%
62	30.00%	15.00%	25.00%
63	25.00%	12.50%	25.00%
64	22.00%	18.00%	30.00%
65	40.00%	15.00%	100.00%
66	25.00%	20.00%	100.00%
67	25.00%	20.00%	100.00%
68	30.00%	25.00%	100.00%
69	30.00%	20.00%	100.00%
70	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

Disability rates

It was assumed that the following percentage of eligible employees would become permanently disabled each year:

<u>Age</u>	<u>Standard</u>	<u>Teachers</u>	<u>Public Safety</u>
20	0.01%	0.05%	0.20%
25	0.01%	0.06%	0.20%
30	0.01%	0.07%	0.21%
35	0.03%	0.10%	0.40%
40	0.07%	0.21%	0.71%
45	0.10%	0.30%	1.00%
50	0.13%	0.42%	1.10%
55	0.14%	0.50%	0.80%
60	0.12%	0.50%	0.80%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Healthcare Trend

It was assumed that healthcare costs would increase in accordance with the trend rates in the following table:

<u>Year</u>	<u>Medical</u>	<u>Dental</u>
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

Participation Rate

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

Percent Married

It was assumed that 80% of male participants and 70% of female participants who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement. It was further assumed that a male spouse is three years older than a female spouse and same sex spouses are assumed to be the same age. For current retirees, the actual census information was used.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Compensation Increases

3.00% per year.

Open Group Forecast

It was assumed for projecting plan liabilities in future years that the active population would remain unchanged and that those who terminate employment or retire will be replaced with new employees with the demographics below:

Open Group Forecast Population Demographics

<u>Age</u>	<u>Male</u>	<u>Female</u>
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 values in this report reflect a closed group and do not reflect any new entrants after the valuation date.

For purposes of this valuation, retiree contributions were assumed to increase with the same trend rate as health care claims.

Medicare Part B Penalties are not reflected

Medicare Part B Reimbursement is not reflected

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely on the retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

- ✓ The cost sharing program is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:
- ✓ The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an "implicit subsidy". GASB 74 and 75 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. 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. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based on factors developed by actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page.

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents' coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program – different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - Based on Active & Retiree Incurred Claims & Premiums

	Number of Participants			
	Single	Two-Person	Family	Total
Fallon Direct			7	7
Fallon Select			2	2
Harvard Pilgrim	5		5	10
Harvard Primary Choice	1		3	4
Tufts Navigator	3		3	6
Tufts Spirit			1	1
Unicare Basic w/ CIC	1		1	2
Unicare Basic w/o CIC				0
Unicare Comm Choice			2	2
Unicare Plus			3	3
Unicare OME w/ CIC	4	3		7
Unicare OME w/o CIC				0
Tufts Medicare Preferred		2		2
Harvard Senior	1	4		5
Fallon Senior				0
Total	15	10	27	52

	Per Contract Costs (monthly) - FY 2018		
	Single	Two-Person	Family
Fallon Direct	554.64		1,331.20
Fallon Select	737.08		1,768.88
Harvard Pilgrim	824.24		2,011.12
Harvard Primary Choice	620.72		1,514.52
Tufts Navigator	728.84		1,778.40
Tufts Spirit	553.28		1,331.92
Unicare Basic w/ CIC	1,038.80		2,430.56
Unicare Basic w/o CIC	991.80		2,321.52
Unicare Comm Choice	520.60		1,249.48
Unicare Plus	693.20		1,656.12
Unicare OME w/ CIC	380.64	761.28	
Unicare OME w/o CIC	369.92	739.84	
Tufts Medicare Preferred	301.04	602.08	
Harvard Senior	423.04	846.08	
Fallon Senior	336.16	672.32	

Gross Expected FY 2018 Incurred Premiums	737,734
Adjustment to reflect children's claims	(90,498)
Total Expected FY 2018 Incurred Premiums (adults only)	647,235

II. PRE-65 AND POST-65 PER CAPITA RETIREE ANNUAL CLAIM COSTS

	<u>Employer</u> <u>Primary</u>	<u>Medicare</u> <u>Primary</u>
Age 65	12,297	4,124
Average Age	8,751	4,555

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

III. BREAKDOWN OF CLAIM COSTS

ALL ACTIVE EMPLOYEES AND SPOUSES

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
24 & Under	1.312	0.549	7,196	3,011	873,520
25 to 29	1.312	0.591	7,196	3,242	4,691,750
30 to 34	1.312	0.712	7,196	3,905	5,749,409
35 to 39	1.312	0.850	7,196	4,662	5,606,510
40 to 44	1.312	1.000	7,196	5,485	6,966,249
45 to 49	1.456	1.193	7,986	6,544	8,379,594
50 to 54	1.599	1.441	8,771	7,904	9,337,032
55 to 59	1.740	1.753	9,544	9,615	10,008,909
60 to 64	1.968	2.102	10,794	11,529	8,725,815
65 to 69	2.168	2.316	11,891	12,703	3,149,133
70 & Over	2.396	2.557	13,142	14,025	<u>1,254,980</u>
Total					64,742,901

ALL RETIREES AND SPOUSES - NOT MEDICARE ELIGIBLE

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
44 & Under	1.312	1.000	7,196	5,485	280,693
45 to 49	1.456	1.193	7,986	6,544	363,916
50 to 54	1.599	1.441	8,771	7,904	964,448
55 to 59	1.740	1.753	9,544	9,615	2,536,828
60 to 64	1.968	2.102	10,794	11,529	7,812,861
65 to 69	2.168	2.316	11,891	12,703	1,699,422
70 to 74	2.396	2.557	13,142	14,025	1,375,024
75 to 79	2.593	2.769	14,223	15,188	483,834
80 to 84	2.724	2.910	14,941	15,961	394,586
85 to 89	2.864	3.059	15,709	16,779	240,985
90 & Over	3.010	3.215	16,510	17,634	<u>118,942</u>
Total					16,271,539

ALL RETIREES AND SPOUSES - MEDICARE ELIGIBLE

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
65 to 69	2.168	2.316	3,988	4,260	4,044,840
70 to 74	2.396	2.557	4,407	4,703	3,748,765
75 to 79	2.593	2.769	4,770	5,093	2,423,260
80 to 84	2.724	2.910	5,011	5,353	2,058,860
85 to 89	2.864	3.059	5,268	5,627	1,576,030
90 & Over	3.010	3.215	5,537	5,914	<u>1,193,410</u>
Total					15,045,165

Grand Totals 96,059,605

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

E. DEVELOPMENT OF REPRESENTATIVE DENTAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - with Active & Retiree Incurred Premiums

	Per Contract Costs (monthly) - FY 2018		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Dental Plan	47.86	108.85	168.19

FY 2018 Expected Per Person Rate 574

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require the following disclosures in the financial statements related to the retiree medical, dental and life insurance benefits;

1. A DESCRIPTION OF THE RETIREE MEDICAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Medical Insurance offered through the Group Insurance Commission ('GIC')
- b. Administrator: Town of Wenham
- c. Eligibility: An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
- d. Cost Sharing: Retirees shall pay 25% of premiums.

2. A DESCRIPTION OF THE RETIREE DENTAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Dental Insurance
- b. Administrator: Town of Wenham
- c. Eligibility: Same as above
- d. Cost sharing: Retirees shall pay 100% of premiums.

3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

- a. Plan Type: Group Term Life Insurance - \$5,000
- b. Administrator: Town of Wenham
- c. Eligibility: Same as above
- d. Cost sharing: Retirees shall pay 25% of premiums.

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

4. RETIREE MEDICAL AND LIFE INSURANCE CONTRIBUTIONS:

Group	Individual	Family
Medical	25%	25%
Dental	100%	100%
Life	25%	N/A

5. FUNDING POLICY

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. For the year ending on the June 30, 2017 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$171,732. The Town is also made a contribution to an OPEB Trust of \$20,000 for a total contribution during the period of \$191,732.

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

6. INVESTMENT POLICY

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

Investment Target Allocation & Expected Long-Term Real Rate of Return			
Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return
Domestic Equity - Large Cap	26.75%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	13.25%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	13.25%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	6.75%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	30.00%	Domestic Fixed Income	2.00%
International Fixed Income	10.00%	International Fixed Income	3.00%
Alternatives	0.00%	Alternatives	6.50%
Real Estate	0.00%	Real Estate	6.25%
Cash	0.00%	Cash	0.00%
Total	100.00%		
		I. Real Rate of Return	3.83%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	6.58%
		IV. Investment Expense	0.25%
		V. Net Investment Return [III.-IV.]	6.33%

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

7. ACTUARIALLY DETERMINED CONTRIBUTION (ADC)

The Town's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which represents a level of funding that, if paid on an ongoing basis, is projected to cover the service cost each year and amortize any unfunded actuarial liabilities (or funding excess). The following table shows the components of the Town's annual ADC for the fiscal year and the amount actually contributed to the plan:

Actuarially Determined Contribution - Deficiency / (Excess)	
<u>For the Fiscal Year Ending June 30, 2018</u>	
I. Service Cost	190,103
II. 30 year level flat dollar amortization of NOL at 5.25%	<u>303,843</u>
III. Actuarial Determined Contribution [I. + II.]	493,946
IV. Contributions in relation to the actuarially determined contribution	<u>(191,732)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>302,214</u>
Covered employee payroll	2,896,297
Contributions as a % of covered employee payroll	6.62%

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

8. FUNDED STATUS AND FUNDING PROGRESS

As of the June 30, 2017 Measurement Date, the plan was 1.36% funded. The Total OPEB Liability (TOL) for benefits was \$4,845,052, and the Fiduciary Net Position was \$66,067, resulting in a Net OPEB Liability (NOL) of \$4,778,985. The covered payroll (annual payroll of active employees covered by the plan) was \$ 2,896,297 and the ratio of the NOL to the covered payroll was 165.0%.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the actuarially determined contribution of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented in the required supplementary information following the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the Total OPEB Liabilities for benefits.

Measurement Date	Fiduciary Net Position	Total OPEB Liability	Net OPEB Liability	Funded Ratio	Covered Payroll	NOL as a % of Covered Payroll
06/30/2019 (est.)	\$148,836	\$5,457,205	\$5,308,369	2.7%	\$3,072,682	172.8%
06/30/2018 (est.)	\$101,184	\$5,147,673	\$5,046,489	2.0%	\$2,983,186	169.2%
06/30/2017	\$66,067	\$4,845,052	\$4,778,985	1.4%	\$2,896,297	165.0%
06/30/2016	\$45,662	\$5,363,389	\$5,317,727	0.9%	\$3,809,956	139.6%
06/30/2015	\$25,371	\$5,059,967	\$5,034,596	0.5%	\$3,698,986	136.1%
06/30/2014	\$0	\$4,348,299	\$4,348,299	0.0%	\$3,591,249	121.1%

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

9. **FIDUCIARY NET POSITION**

Statement of Fiduciary Net Position		
June 30, 2017 and June 30, 2018		
	<u>June 30, 2018 (Projected)</u>	<u>June 30, 2017</u>
Assets		
I. Cash and cash equivalents	0	0
<u>Receivables & Prepaid expenses:</u>		
II. Contributions	0	0
III. Investment Income	0	0
IV. Receivables from brokers for unsettled trades	0	0
V. Prepaid expenses	<u>0</u>	<u>0</u>
VI. Total Receivables [II.+III.+IV.+V.]	<u>0</u>	<u>0</u>
<u>OPEB Trust Investments:</u>		
VII. Fixed Income	40,474	26,427
VIII. Stocks	60,710	39,640
IX. Cash and cash equivalents	0	0
X. Real estate	0	0
XI. Alternative investments	<u>0</u>	<u>0</u>
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	<u>101,184</u>	<u>66,067</u>
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
Total Assets	101,184	66,067
Liabilities		
XIII. Accrued expenses and benefits payable	0	0
XIV. Securities lending cash collateral	0	0
XV. Payable to brokers for unsettled trades	<u>0</u>	<u>0</u>
XVI. Total liabilities [XIII.+XIV.+XV.]	<u>0</u>	<u>0</u>
XVII. Net Position restricted for OPEB [XII.-XVI.]	101,184	66,067

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

9. **FIDUCIARY NET POSITION (CONTINUED)**

Statement of Changes in Fiduciary Net Position for the Year ended June 30, 2018 (Projected)	
	<u>June 30, 2017</u>
Additions	
<u>Contributions</u>	
Employer Contributions to OPEB Trust	20,000
Total Contributions	20,000
<u>Investment Income / (loss)</u>	
Interest	1,321
Dividends	793
Equity fund income, net	0
Net increase in fair value of investments	13,003
Securities lending income	0
Less investment expenses:	
Direct investment expense	0
Securities lending management fees	0
Securities lending borrower rebates	0
Net investment income	15,117
Other income	0
Total Additions	<u>35,117</u>
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Total deductions	<u>0</u>
Net increase (decrease)	35,117
Net Position restricted for OPEB	
Beginning of year	<u>66,067</u>
End of year	101,184

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

10. OPEB LIABILITY, OPEB EXPENSE AND ADC

	Fiscal Year Ending June 30, 2018							Total
	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Highway Employees and Retirees	Library Employees and Retirees	Water Enterprise Employees and Retirees		
I. Total OPEB Liability	692,990	1,865,463	506,430	626,178	694,870	459,121	4,845,052	
II. Fiduciary Net Position as of June 30, 2017	9,445	25,446	6,949	8,526	9,437	6,264	66,067	
III. Net OPEB Liability (Asset) [I.-II.]	683,545	1,840,017	499,481	617,652	685,433	452,857	4,778,985	
IV. Service Cost	59,814	52,579	12,725	34,555	23,769	6,661	190,103	
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	27,428	95,144	25,875	32,781	35,713	23,162	240,103	
VI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	-	-	-	-	-	-	-	
VII. Recognition of Deferred (Inflows)/Outflows from Plan Experience	-	-	-	-	-	-	-	
VIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	-	-	-	-	-	-	-	
IX. Projected Earnings on OPEB Plan Investments	(505.00)	(1,251)	(369)	(455)	(502)	(332)	(3,514)	
X. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	-	-	-	-	-	-	-	
XI. Financial Statement Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.]	86,737	146,372	38,231	66,881	58,980	29,491	426,692	
XII. Employer Share of Costs	(41,564)	(63,865)	(11,648)	(20,742)	(20,654)	(13,259)	(171,732)	
XIII. Employer Payments (Withdrawals) to/from OPEB Trust	(2,935)	(7,626)	(2,083)	(2,629)	(2,867)	(1,860)	(20,000)	
XIV. Total Employer Contribution [X.+XII.]	(44,499)	(71,491)	(13,731)	(23,371)	(23,521)	(15,119)	(191,732)	
XV. Net OPEB Expense [XI.+XIV.]	42,238	74,881	24,500	43,510	35,459	14,372	234,960	
XVI. Actuarial Determined Contribution (ADC)	106,620	168,215	44,155	72,937	66,737	35,282	493,946	
XVII. Total Expected Contribution	44,499	71,491	13,731	23,371	23,521	15,119	191,732	
XVIII. Percentage of ADC Contributed [XVII./XVI.]	42%	42%	31%	32%	35%	43%	39%	

	Fiscal Year Ending June 30, 2019							Total
	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Highway Employees and Retirees	Library Employees and Retirees	Water Enterprise Employees and Retirees		
I. Total OPEB Liability	755,208	1,962,765	536,117	676,769	738,083	478,731	5,147,673	
II. Fiduciary Net Position as of June 30, 2018	23,381	34,920	9,537	11,777	12,991	8,578	101,184	
III. Net OPEB Liability (Asset) [I.-II.]	731,827	1,927,845	526,580	664,992	725,092	470,153	5,046,489	
IV. Service Cost	58,279	51,228	12,398	33,667	23,158	6,490	185,220	
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	29,746	103,180	28,060	35,550	38,729	25,118	260,383	
VI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	-	-	-	-	-	-	-	
VII. Recognition of Deferred (Inflows)/Outflows from Plan Experience	3,139	8,157	2,228	2,813	3,068	1,990	21,394	
VIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	-	-	-	-	-	-	-	
IX. Projected Earnings on OPEB plan investments	(735)	(1,967)	(537)	(663)	(731)	(483)	(5,116)	
X. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	91	237	65	82	89	58	622	
XI. Financial Statement Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.]	90,520	160,835	42,214	71,448	64,313	33,172	462,503	
XII. Employer Share of Costs	(34,606)	(53,174)	(9,698)	(17,270)	(17,196)	(11,039)	(142,983)	
XIII. Employer Payments (Withdrawals) to/from OPEB Trust	(4,402)	(11,439)	(3,124)	(3,944)	(4,301)	(2,790)	(30,000)	
XIV. Total Employer Contribution [X.+XII.]	(39,008)	(64,613)	(12,822)	(21,214)	(21,497)	(13,829)	(172,983)	
XV. Net OPEB Expense [XI.+XIV.]	51,512	96,222	29,392	50,234	42,816	19,343	289,520	
XVI. Actuarial Determined Contribution (ADC)	104,808	173,799	45,877	75,947	69,259	36,382	506,072	
XVII. Total Expected Contribution	39,008	64,613	12,822	21,214	21,497	13,829	172,983	
XVIII. Percentage of ADC Contributed [XVII./XVI.]	37%	37%	28%	28%	31%	38%	34%	

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

11. OPEB LIABILITY, OPEB EXPENSE AND DEFERRED INFLOW/OUTFLOW

Source of Deferred Inflow/Outflow		
	For the Reporting Date	
	June 30, 2018	June 30, 2019
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	118,520	97,126
II. Deferred (Inflow)/Outflow from Investment Experience	3,109	2,487
III. Deferred (Inflow)/Outflow from Changes in Benefit Terms	0	0
IV. Deferred (Inflow)/Outflow from Changes in Assumptions	0	0

Change in Deferred Inflow/Outflow		
	For the period ending on the Measurement Date	
	June 30, 2017	June 30, 2018
I. Deferred Outflow at the beginning of the period	0	121,629
II. Deferred Outflow created during the period	121,629	0
III. Deferred Outflow recognized during the period	0	22,016
IV. Change in Deferred Outflow (II. + III.)	121,629	22,016
V. Deferred Outflow at end of the period (I. - IV.)	121,629	99,613
VI. Deferred Inflow at the beginning of the period	0	0
VII. Deferred Inflow created during the period	0	0
VIII. Deferred Inflow recognized during the period	0	0
IX. Change in Deferred Inflow (VII. + VIII.)	0	0
X. Deferred Inflow at end of the period (VI. - IX.)	0	0

Net OPEB Liability		
	For the Reporting Date	
	June 30, 2018	June 30, 2019
I. Net OPEB Liability at beginning of period	4,422,396	4,778,985
II. Net OPEB Expense - Excluding Payments	426,692	462,503
III. Total Employer Contributions	<u>(191,732)</u>	<u>(172,983)</u>
IV. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III.)	234,960	289,520
V. Deferred Outflow created during the period	121,629	0
VI. Deferred Inflow created during the period	0	0
VII. Net OPEB Liability at end of period (I. + IV. + V + VI)	4,778,985	5,068,505

Net OPEB Expense		
	For the period ending on the Measurement Date	
	June 30, 2017	June 30, 2018
I. Service Cost	190,103	185,220
II. Interest on Total OPEB Liability, Service Cost, and Payments	240,103	260,383
III. Projected Investment Income	<u>(3,514)</u>	<u>(5,116)</u>
IV. Recognition of Deferred (Inflow)/Outflow	0	22,016
V. Financial Statement Expense [I. + II. + III. + IV.]	426,692	462,503
VI. Benefit Payments	<u>(171,732)</u>	<u>(142,983)</u>
VII. Contributions to Trust	<u>(20,000)</u>	<u>(30,000)</u>
VIII. Total Employer Payments [VI. + VII.]	<u>(191,732)</u>	<u>(172,983)</u>
IX. Total Net OPEB Expense under GASB 75 (V. + VIII.)	234,960	289,520

Measurement Date	June 30, 2017	June 30, 2018
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EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

12. EFFECT OF 1% CHANGE IN HEALTHCARE TREND

In the event that healthcare trend rates were 1% higher than forecast and employee contributions were to increase at the forecast rates, the Total OPEB Liability would increase to \$6,045,630 or by 24.8% and the Net OPEB Liability would increase to \$5,979,563 or by 25.1%. The corresponding Service Cost would increase to \$262,338 or by 38.0%. If such healthcare trend rates were 1% less than forecast and employee contributions were to increase at the forecast rate, the Total OPEB Liability would decrease to \$3,902,039 or by 19.5% and the Net OPEB Liability would decrease to \$3,835,972 or by 19.7%. The corresponding Service Cost would decrease to \$136,614 or by 28.1%.

Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2017 Measurement Date

	<u>1% Decrease (4.00%)</u>	<u>Current Trend Rate (5.00%)</u>	<u>1% Increase (6.00%)</u>
I. Total OPEB Liability	3,902,039	4,845,052	6,045,630
II. Fiduciary Net Position	<u>66,067</u>	<u>66,067</u>	<u>66,067</u>
III. Net OPEB Liability (Asset) [I-II.]	3,835,972	4,778,985	5,979,563
IV. Service Cost	136,614	190,103	262,338

13. EFFECT OF 1% CHANGE IN DISCOUNT RATES

As of the June 30, 2017 Measurement Date, if the discount rate were 1% higher than what was used in this valuation, the Total OPEB Liability would decrease to \$4,207,846 or by 13.2% and the Net OPEB Liability would decrease to \$4,141,779 or by 13.3%. The corresponding Service Cost would decrease to \$149,278 or by 21.5%. If the discount rate were 1% lower than was used in this valuation, the Total OPEB Liability would increase to \$5,638,456 or by 16.4% and the Net OPEB Liability would increase to \$5,572,389 or by 16.6%. The corresponding Service Cost would increase to \$244,784 or by 28.8%.

Impact of a 1% Change in the Discount Rate as of the June 30, 2017 Measurement Date

	<u>1% Decrease (4.25%)</u>	<u>Current Discount Rate (5.25%)</u>	<u>1% Increase (6.25%)</u>
I. Total OPEB Liability	5,638,456	4,845,052	4,207,846
II. Fiduciary Net Position	<u>66,067</u>	<u>66,067</u>	<u>66,067</u>
III. Net OPEB Liability (Asset) [I-II.]	5,572,389	4,778,985	4,141,779
IV. Service Cost	244,784	190,103	149,278

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

14. ACTUARIAL METHODS AND ASSUMPTIONS

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Actuarial Cost Method: Individual Entry Age Normal
Discount Rate: 5.25% per annum (previously 4.00%)
Healthcare Trend Rates

<u>Year</u>	<u>Medical</u>	<u>Dental</u>
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

General Inflation Assumption: 2.75% per annum
Annual Compensation Increases: 3.00% per annum
Actuarial Value of Assets: Market Value

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

15. RECOGNITION OF OPEB TRUST ASSETS

The State of Massachusetts has passed legislation allowing municipal entities to establish a Trust for Other Postemployment Benefits (“OPEB”) under M.G.L. Chapter 32B, Section 20 for purposes of accumulating assets to pre-fund the liabilities under GASB 75. This legislation was amended effective November 9, 2016 to clarify who may adopt such a Trust and provide guidance on the ongoing operation of such a Trust. To the best of our knowledge, the Town of Wenham has established an irrevocable trust for the purposes of prefunding liabilities under GASB 74/75.

16. OPEB EXPENSE DEVELOPMENT

Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2018	
Description	Amount
I. Service Cost	190,103
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	240,103
III. Deferred (Inflows)/Outflows from Plan Design Changes*	0
IV. Deferred (Inflows)/Outflows from Plan Experience**	0
V. Deferred (Inflows)/Outflows from Changes of Assumptions**	0
VI. Projected earnings on OPEB plan investments	(3,514)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	0
VIII. Total Employer Contributions	(191,732)
IX. OPEB Plan administrative expense	0
X. Other changes in fiduciary net position	0
XI. Net OPEB expense [I.+II.+III.+IV.+V.+VI.+VII.+VIII.+IX.+ X.]	234,960

* Recognized Immediately

** Amortized over 5.54 years

*** Amortized over 5 years

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

17. CHANGES IN NET OPEB LIABILITY

Changes in Net OPEB Liability			
	Increase (Decrease)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
I. Balances at June 30, 2016 GASB 45	5,363,389	45,662	5,317,727
II. Change in Assumptions for GASB 75	<u>(895,331)</u>	<u>0</u>	<u>(895,331)</u>
III. Balances at June 30, 2016 GASB 75 [I. + II.]	4,468,058	45,662	4,422,396
Changes for the year:			
IV. Service Cost	190,103	0	190,103
V. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	240,103	0	240,103
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	118,520	0	118,520
IX. Net Investment Income	0	405	(405)
X. Employer Contributions to Trust	0	191,732	(191,732)
XI. Benefit Payments Withdrawn from Trust	0	(171,732)	171,732
XII. Benefit payments excluding Implicit Cost	N/A	0	N/A
XIII. Implicit Cost amount	N/A	0	N/A
XIV. Total Benefit payments including Implicit Cost [XII. + XIII.]	<u>(171,732)</u>	0	<u>(171,732)</u>
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>376,994</u>	<u>20,405</u>	<u>356,589</u>
XVII. Balances at June 30, 2017 [III.+XVII.]	4,845,052	66,067	4,778,985

* Recognized Immediately

** Amortized over 5.54 years

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

18. MONEY WEIGHTED RATE OF RETURN

Determination of Beginning & Ending Balances of OPEB Plan Investments for Purposes of Calculating the Annual Money-Weighted Rate of Return		
	Ending OPEB Plan Investments *	Beginning OPEB Plan Investments **
Assets		
Cash and cash equivalents	0	0
Receivables:		
Investment income	0	0
Receivables from brokers for unsettled trades	0	0
Investments		
Fixed income	40,474	26,427
Stocks	60,710	39,640
Cash and cash equivalents	0	0
Real estate	0	0
Alternative investments	0	0
Invested securities lending cash collateral	0	0
Liabilities		
Securities lending cash collateral	0	0
Payable to brokers for unsettled trades	0	0
Total OPEB plan investments	101,184	66,067
* From balances at June 30, 2018 (Projected)		
** From balances at June 30, 2017		

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

18. MONEY WEIGHTED RATE OF RETURN (CONTINUED)

	Plan Investments / Net External	Periods Invested	Period Weight
I. Beginning value - July 1, 2016	45,662	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	20,000	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	20,000		
III. Earnings and increase in fair value	(701)		
IV. Ending value - June 30, 2017 [I.+II.+III.]	64,961		
Money Weighted Rate of Return	-1.26%		
Asset Value - June 30, 2017	66,067		

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

19. PLAN CASH FLOWS

Aggregate External (Noninvestment Cash Flows)	
<u>June 30, 2018</u>	
Additions	
<u>Contributions</u>	
Member contributions	0
Employer contributions	20,000
Other income	0
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Beginning balances of noninvestment-related assets and liabilities *	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Ending balances of noninvestment-related assets and liabilities **	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Change in capital assets - depreciation	0
Aggregate external cash flows	20,000
* From balances at June 30, 2018 (Projected)	
** From balances at June 30, 2017	

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

19. PLAN CASH FLOWS (CONTINUED)

Reconciliation of Beginning & Ending Balances of OPEB Plan Investments, Aggregate External Cash Flows, and Net Investment Income	
	<u>June 30, 2018 (Projected)</u>
I. Total OPEB plan investments, beginning of year	66,067
II. Aggregate external cash flows	20,000
III. Net investment income	<u>15,117</u>
IV. Total OPEB plan investments, end of year [I.+II.+III.]	<u><u>101,184</u></u>

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

20. PLAN PROJECTION DISCLOSURES

Projection of Contributions using a June 30, 2017 Valuation Date

Fiscal Year	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.]
2018	2,896,297	0	2,896,297	0	171,732	0	171,732
2019	2,691,948	291,238	2,983,186	0	142,985	0	142,985
2020	2,502,475	570,207	3,072,682	0	147,649	0	147,649
2021	2,392,403	772,459	3,164,862	0	164,826	0	164,826
2022	2,287,261	972,547	3,259,808	0	178,536	0	178,536
2023	2,075,875	1,281,727	3,357,602	0	194,425	0	194,425
2024	1,994,581	1,463,749	3,458,330	0	220,934	0	220,934
2025	1,867,009	1,695,071	3,562,080	0	241,631	0	241,631
2026	1,795,131	1,873,811	3,668,942	0	266,568	0	266,568
2027	1,688,819	2,090,191	3,779,010	0	288,404	0	288,404
2028	1,579,647	2,312,733	3,892,380	0	300,489	0	300,489
2029	1,494,120	2,515,031	4,009,151	0	325,533	0	325,533
2030	1,328,273	2,801,153	4,129,426	0	346,306	2,173	348,479
2031	1,220,937	3,032,372	4,253,309	0	351,683	5,607	357,290
2032	1,110,884	3,270,024	4,380,908	0	380,918	10,657	391,575
2033	1,031,982	3,480,353	4,512,335	0	405,792	17,134	422,926
2034	946,202	3,701,503	4,647,705	0	405,940	24,984	430,924
2035	861,063	3,926,073	4,787,136	0	417,631	32,654	450,285
2036	818,574	4,112,176	4,930,750	0	432,609	40,992	473,601
2037	761,443	4,317,230	5,078,673	0	427,465	50,492	477,957
2038	691,365	4,539,668	5,231,033	0	428,156	59,647	487,803
2039	641,930	4,746,034	5,387,964	0	444,855	69,781	514,636
2040	598,856	4,950,747	5,549,603	0	452,329	81,867	534,196
2041	554,579	5,161,512	5,716,091	0	463,514	98,464	561,978
2042	506,162	5,381,412	5,887,574	0	476,996	119,130	596,126
2043	468,017	5,596,184	6,064,201	0	492,327	142,926	635,253
2044	415,914	5,830,213	6,246,127	0	513,866	170,901	684,767
2045	352,744	6,080,767	6,433,511	0	524,540	197,710	722,250
2046	293,758	6,332,758	6,626,516	0	539,640	227,438	767,078
2047	244,971	6,580,340	6,825,311	0	548,338	258,797	807,135
2048	204,719	6,825,351	7,030,070	0	562,435	290,460	852,895
2049	164,245	7,076,727	7,240,972	0	538,490	324,278	862,768
2050	128,398	7,329,803	7,458,201	0	526,713	359,595	886,308
2051	102,202	7,579,745	7,681,947	0	531,814	400,621	932,435
2052	76,179	7,836,226	7,912,405	0	509,546	445,147	954,693
2053	47,888	8,101,889	8,149,777	0	490,368	492,906	983,274
2054	39,168	8,355,102	8,394,270	0	486,532	545,938	1,032,470
2055	31,711	8,614,387	8,646,098	0	484,629	600,394	1,085,023
2056	26,196	8,879,285	8,905,481	0	471,105	658,620	1,129,725
2057	15,492	9,157,153	9,172,645	0	466,170	719,239	1,185,409

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

Projection of Contributions using a June 30, 2017 Valuation Date (Continued)

Fiscal Year	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.]
2058	13,021	9,434,803	9,447,824	0	461,253	783,552	1,244,805
2059	11,339	9,719,920	9,731,259	0	451,410	851,189	1,302,599
2060	9,287	10,013,910	10,023,197	0	443,182	921,705	1,364,887
2061	7,610	10,316,283	10,323,893	0	433,985	998,117	1,432,102
2062	5,836	10,627,774	10,633,610	0	424,140	1,078,820	1,502,960
2063	0	10,952,618	10,952,618	0	413,315	1,164,335	1,577,650
2064	0	11,281,197	11,281,197	0	402,470	1,255,634	1,658,104
2065	0	11,619,633	11,619,633	0	390,187	1,350,390	1,740,577
2066	0	11,968,222	11,968,222	0	377,283	1,450,628	1,827,911
2067	0	12,327,269	12,327,269	0	363,915	1,556,235	1,920,150
2068	0	12,697,087	12,697,087	0	350,253	1,666,664	2,016,917
2069	0	13,078,000	13,078,000	0	336,325	1,782,572	2,118,897
2070	0	13,470,340	13,470,340	0	322,097	1,903,450	2,225,547
2071	0	13,874,450	13,874,450	0	308,520	2,030,488	2,339,008
2072	0	14,290,684	14,290,684	0	296,437	2,162,863	2,459,300
2073	0	14,719,405	14,719,405	0	283,756	2,301,349	2,585,105
2074	0	15,160,987	15,160,987	0	270,452	2,446,954	2,717,406
2075	0	15,615,817	15,615,817	0	256,400	2,598,868	2,855,268
2076	0	16,084,292	16,084,292	0	241,567	2,758,010	2,999,577
2077	0	16,566,821	16,566,821	0	225,940	2,924,559	3,150,499
2078	0	17,063,826	17,063,826	0	209,536	3,098,710	3,308,246
2079	0	17,575,741	17,575,741	0	192,434	3,280,579	3,473,013
2080	0	18,103,013	18,103,013	0	174,899	3,470,565	3,645,464
2081	0	18,646,103	18,646,103	0	157,248	3,669,721	3,826,969
2082	0	19,205,486	19,205,486	0	139,635	3,877,999	4,017,634
2083	0	19,781,651	19,781,651	0	122,791	4,096,208	4,218,999
2084	0	20,375,101	20,375,101	0	106,651	4,325,094	4,431,745
2085	0	20,986,354	20,986,354	0	91,576	4,565,342	4,656,918
2086	0	21,615,945	21,615,945	0	77,694	4,817,323	4,895,017
2087	0	22,264,423	22,264,423	0	65,260	5,081,825	5,147,085
2088	0	22,932,356	22,932,356	0	54,156	5,359,349	5,413,505
2089	0	23,620,327	23,620,327	0	44,410	5,650,680	5,695,090
2090	0	24,328,937	24,328,937	0	36,003	5,956,391	5,992,394
2091	0	25,058,805	25,058,805	0	28,759	6,277,525	6,306,284
2092	0	25,810,569	25,810,569	0	22,714	6,614,903	6,637,617
2093	0	26,584,886	26,584,886	0	17,663	6,969,313	6,986,976
2094	0	27,382,433	27,382,433	0	13,530	7,341,882	7,355,412
2095	0	28,203,906	28,203,906	0	10,240	7,733,569	7,743,809
2096	0	29,050,023	29,050,023	0	7,659	8,145,277	8,152,936

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Financial Statement Disclosure
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(continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Projection of OPEB Plan's Fiduciary Net Position using a June 30, 2017 Valuation Date								
Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members	III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings	VIII. Projected Ending Fiduciary Net Position for Current Plan Members
2018	66,067	171,732	171,732	0	20,000	20,000	15,117	101,184
2019	101,184	142,985	142,985	0	30,000	27,071	7,340	135,595
2020	135,595	147,649	147,649	0	40,000	32,577	9,830	178,002
2021	178,002	164,826	164,826	0	50,000	37,796	12,826	228,624
2022	228,624	178,536	178,536	0	60,000	42,099	16,342	287,065
2023	287,065	194,425	194,425	0	70,000	43,278	20,353	350,696
2024	350,696	220,934	220,934	0	80,000	46,140	24,692	421,528
2025	421,528	241,631	241,631	0	90,000	47,172	29,488	498,188
2026	498,188	266,568	266,568	0	100,000	48,928	34,652	581,768
2027	581,768	288,404	288,404	0	110,000	49,158	40,254	671,180
2028	671,180	300,489	300,489	0	120,000	48,700	46,225	766,105
2029	766,105	325,533	325,533	0	130,000	48,448	52,546	867,099
2030	867,099	346,306	348,479	0	140,000	45,032	59,250	969,208
2031	969,208	351,683	357,290	0	150,000	43,058	66,026	1,072,685
2032	1,072,685	380,918	391,575	0	160,000	40,572	72,887	1,175,487
2033	1,175,487	405,792	422,926	0	170,000	38,879	79,706	1,276,938
2034	1,276,938	405,940	430,924	0	180,000	36,645	86,440	1,375,039
2035	1,375,039	417,631	450,285	0	190,000	34,175	92,961	1,469,521
2036	1,469,521	432,609	473,601	0	550,000	91,308	110,161	1,629,998
2037	1,629,998	427,465	477,957	0	550,000	82,461	120,319	1,782,286
2038	1,782,286	428,156	487,803	0	550,000	72,691	129,959	1,925,289
2039	1,925,289	444,855	514,636	0	550,000	65,528	139,011	2,060,047
2040	2,060,047	452,329	534,196	0	550,000	59,350	147,541	2,185,071
2041	2,185,071	463,514	561,978	0	550,000	53,361	155,455	2,295,423
2042	2,295,423	476,996	596,126	0	550,000	47,284	162,441	2,386,018
2043	2,386,018	492,327	635,253	0	550,000	42,447	168,175	2,453,714
2044	2,453,714	513,866	684,767	0	550,000	36,623	172,461	2,491,897
2045	2,491,897	524,540	722,250	0	550,000	30,156	174,877	2,499,220
2046	2,499,220	539,640	767,078	0	550,000	24,382	175,341	2,471,505
2047	2,471,505	548,338	807,135	0	550,000	19,740	173,587	2,406,035
2048	2,406,035	562,435	852,895	0	550,000	16,016	169,442	2,301,033
2049	2,301,033	538,490	862,768	0	550,000	12,475	162,796	2,152,026
2050	2,152,026	526,713	886,308	0	550,000	9,469	153,364	1,955,264
2051	1,955,264	531,814	932,435	0	550,000	7,317	140,909	1,702,869
2052	1,702,869	509,546	954,693	0	550,000	5,295	124,932	1,387,949
2053	1,387,949	490,368	983,274	0	0	0	87,857	982,900
2054	982,900	486,532	1,032,470	0	0	0	62,218	499,180
2055	499,180	484,629	1,085,023	0	0	0	31,598	31,598
2056	31,598	471,105	1,129,725	0	0	0	2,000	2,000
2057	2,000	466,170	1,185,409	0	0	0	127	127

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(continued)

Projection of OPEB Plan's Fiduciary Net Position using a June 30, 2017 Valuation Date (Continued)

Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members		III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings	VIII. Projected Ending Fiduciary Net Position for Current Plan Members
2058	127	461,253		1,244,805	0	0	0	8	8
2059	8	451,410		1,302,599	0	0	0	1	1
2060	1	443,182		1,364,887	0	0	0	0	0
2061	0	433,985		1,432,102	0	0	0	0	0
2062	0	424,140		1,502,960	0	0	0	0	0
2063	0	413,315		1,577,650	0	0	0	0	0
2064	0	402,470		1,658,104	0	0	0	0	0
2065	0	390,187		1,740,577	0	0	0	0	0
2066	0	377,283		1,827,911	0	0	0	0	0
2067	0	363,915		1,920,150	0	0	0	0	0
2068	0	350,253		2,016,917	0	0	0	0	0
2069	0	336,325		2,118,897	0	0	0	0	0
2070	0	322,097		2,225,547	0	0	0	0	0
2071	0	308,520		2,339,008	0	0	0	0	0
2072	0	296,437		2,459,300	0	0	0	0	0
2073	0	283,756		2,585,105	0	0	0	0	0
2074	0	270,452		2,717,406	0	0	0	0	0
2075	0	256,400		2,855,268	0	0	0	0	0
2076	0	241,567		2,999,577	0	0	0	0	0
2077	0	225,940		3,150,499	0	0	0	0	0
2078	0	209,536		3,308,246	0	0	0	0	0
2079	0	192,434		3,473,013	0	0	0	0	0
2080	0	174,899		3,645,464	0	0	0	0	0
2081	0	157,248		3,826,969	0	0	0	0	0
2082	0	139,635		4,017,634	0	0	0	0	0
2083	0	122,791		4,218,999	0	0	0	0	0
2084	0	106,651		4,431,745	0	0	0	0	0
2085	0	91,576		4,656,918	0	0	0	0	0
2086	0	77,694		4,895,017	0	0	0	0	0
2087	0	65,260		5,147,085	0	0	0	0	0
2088	0	54,156		5,413,505	0	0	0	0	0
2089	0	44,410		5,695,090	0	0	0	0	0
2090	0	36,003		5,992,394	0	0	0	0	0
2091	0	28,759		6,306,284	0	0	0	0	0
2092	0	22,714		6,637,617	0	0	0	0	0
2093	0	17,663		6,986,976	0	0	0	0	0
2094	0	13,530		7,355,412	0	0	0	0	0
2095	0	10,240		7,743,809	0	0	0	0	0
2096	0	7,659		8,152,936	0	0	0	0	0

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a June 30, 2017 Valuation Date

Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2018	66,067	171,732	66,067	105,665	66,067	105,665	171,732
2019	101,184	142,985	101,184	41,801	95,160	40,533	135,855
2020	135,595	147,649	135,595	12,054	119,931	11,334	133,292
2021	178,002	164,826	164,826	0	137,107	0	141,379
2022	228,624	178,536	178,536	0	139,670	0	145,503
2023	287,065	194,425	194,425	0	143,045	0	150,551
2024	350,696	220,934	220,934	0	152,872	0	162,548
2025	421,528	241,631	241,631	0	157,240	0	168,911
2026	498,188	266,568	266,568	0	163,140	0	177,051
2027	581,768	288,404	288,404	0	165,997	0	182,003
2028	671,180	300,489	300,489	0	162,656	0	180,174
2029	766,105	325,533	325,533	0	165,722	0	185,458
2030	867,099	346,306	346,306	0	165,802	0	187,455
2031	969,208	351,683	351,683	0	158,353	0	180,873
2032	1,072,685	380,918	380,918	0	161,306	0	186,140
2033	1,175,487	405,792	405,792	0	161,609	0	188,408
2034	1,276,938	405,940	405,940	0	152,044	0	179,079
2035	1,375,039	417,631	417,631	0	147,111	0	175,049
2036	1,469,521	432,609	432,609	0	143,315	0	172,286
2037	1,629,998	427,465	427,465	0	133,180	0	161,749
2038	1,782,286	428,156	428,156	0	125,454	0	153,932
2039	1,925,289	444,855	444,855	0	122,588	0	151,961
2040	2,060,047	452,329	452,329	0	117,227	0	146,809
2041	2,185,071	463,514	463,514	0	112,974	0	142,938
2042	2,295,423	476,996	476,996	0	109,339	0	139,761
2043	2,386,018	492,327	492,327	0	106,135	0	137,061
2044	2,453,714	513,866	513,866	0	104,183	0	135,924
2045	2,491,897	524,540	524,540	0	100,016	0	131,829
2046	2,499,220	539,640	539,640	0	96,770	0	128,861
2047	2,471,505	548,338	548,338	0	92,476	0	124,409
2048	2,406,035	562,435	562,435	0	89,207	0	121,245
2049	2,301,033	538,490	538,490	0	80,324	0	110,295
2050	2,152,026	526,713	526,713	0	73,890	0	102,503
2051	1,955,264	531,814	531,814	0	70,165	0	98,335
2052	1,702,869	509,546	509,546	0	63,225	0	89,520
2053	1,387,949	490,368	490,368	0	57,223	0	81,855
2054	982,900	486,532	486,532	0	53,395	0	77,165
2055	499,180	484,629	484,629	0	50,020	0	73,031
2056	31,598	471,105	182,079	289,026	17,674	89,668	67,453
2057	2,000	466,170	146,100	320,070	13,337	96,287	63,418

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a June 30, 2017 Valuation Date (Continued)

Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2058	127	461,253	101,565	359,688	8,720	104,923	59,620
2059	8	451,410	137,456	313,954	11,099	88,805	55,439
2060	1	443,182	133,808	309,374	10,161	84,855	51,714
2061	0	433,985	129,708	304,277	9,263	80,926	48,116
2062	0	424,140	125,800	298,340	8,449	76,940	44,680
2063	0	413,315	121,774	291,541	7,692	72,906	41,368
2064	0	402,470	117,593	284,877	6,986	69,079	38,274
2065	0	390,187	113,775	276,412	6,357	64,993	35,256
2066	0	377,283	109,121	268,162	5,734	61,141	32,390
2067	0	363,915	104,617	259,298	5,170	57,327	29,685
2068	0	350,253	100,228	250,025	4,658	53,600	27,146
2069	0	336,325	95,724	240,601	4,184	50,015	24,766
2070	0	322,097	91,252	230,845	3,751	46,532	22,536
2071	0	308,520	86,882	221,638	3,359	43,321	20,510
2072	0	296,437	83,095	213,342	3,021	40,435	18,724
2073	0	283,756	79,325	204,431	2,712	37,570	17,029
2074	0	270,452	75,325	195,127	2,422	34,773	15,421
2075	0	256,400	71,191	185,209	2,153	32,004	13,891
2076	0	241,567	66,787	174,780	1,900	29,286	12,435
2077	0	225,940	62,164	163,776	1,663	26,610	11,051
2078	0	209,536	57,353	152,183	1,443	23,976	9,737
2079	0	192,434	52,366	140,068	1,239	21,398	8,497
2080	0	174,899	47,289	127,610	1,052	18,904	7,337
2081	0	157,248	42,223	115,025	884	16,523	6,268
2082	0	139,635	37,254	102,381	733	14,260	5,288
2083	0	122,791	32,550	90,241	602	12,188	4,419
2084	0	106,651	28,115	78,536	489	10,286	3,646
2085	0	91,576	24,028	67,548	393	8,578	2,975
2086	0	77,694	20,314	57,380	313	7,066	2,398
2087	0	65,260	17,018	48,242	246	5,760	1,914
2088	0	54,156	14,101	40,055	192	4,638	1,509
2089	0	44,410	11,555	32,855	148	3,689	1,176
2090	0	36,003	9,369	26,634	113	2,900	906
2091	0	28,759	7,488	21,271	85	2,246	687
2092	0	22,714	5,921	16,793	63	1,719	516
2093	0	17,663	4,612	13,051	46	1,295	381
2094	0	13,530	3,539	9,991	33	962	277
2095	0	10,240	2,684	7,556	24	705	199
2096	0	7,659	2,013	5,646	17	511	142

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

21. CHANGES TO NET OPEB EXPENSE

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of differences between expected & actual experience								
Fiscal Year	Differences between actual & expected		<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
	experience	Recognition Period (years)						
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	118,520	5.54	<u>0</u>	<u>21,394</u>	<u>21,394</u>	<u>21,394</u>	<u>21,394</u>	<u>21,394</u>
Net increase (decrease) in OPEB expense			0	21,394	21,394	21,394	21,394	21,394

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

21. CHANGES TO NET OPEB EXPENSE (CONTINUED)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of Changes in Assumptions								
Fiscal Year	Differences from changes in		<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
	Actuarial Assumptions	Recognition Period (years)						
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	0	5.54	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in OPEB expense			0	0	0	0	0	0

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)

21. CHANGES TO NET OPEB EXPENSE (CONTINUED)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of differences between Projected & Actual Earnings on OPEB Plan Investments									
Fiscal Year	Differences between actual & expected		Recognition Period (years)	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
	experience								
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018	3,109		5.00	<u>0</u>	<u>622</u>	<u>622</u>	<u>622</u>	<u>622</u>	<u>622</u>
Net increase (decrease) in OPEB expense				0	622	622	622	622	622

EXHIBIT AFinancial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)**22. Impact of Patient Protection and Affordable Care Act ("PPACA") Excise Tax**

Under the Patient Protection and Affordable Care Act ("PPACA"), an excise tax will be imposed for tax years beginning after December 31, 2021 (formerly December 31, 2017, but amended by Congressional Legislation) for high cost employer sponsored health coverage. The law specifies a 40% excise tax, to be paid by the provider of such coverage, of the excess value beyond a basic dollar amount plus an additional "kicker" for qualified retirees or those engaged in a high risk profession. The projected 2022 threshold amounts are \$12,511 for single coverage and \$32,676 for family coverage and a "kicker" amount of \$1,650 for single coverage and \$3,450 for family coverage.

For the fiscal year ending June 30, 2018, the TOL for the excise tax is \$6,456 and the increase in OPEB Expense is \$1,187. Given your premiums through the 2018 fiscal year and the excise tax threshold, your average single premiums are \$4,581 below the excise tax threshold and your average family premiums are \$13,111 below the excise tax threshold. As more regulatory guidance becomes available, the calculation of the excise tax liability will evolve.

EXHIBIT B

Required Supplementary Information
(As of the June 30, 2017 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of June 30, 2017.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, June 30, 2017.
<u>Actuarial Assumptions:</u>	
Investment Rate of Return:	6.33%, net of OPEB plan investment expense, including inflation.
Municipal Bond Rate	3.13% as of June 30, 2017 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
Single Equivalent Discount Rate:	5.25%, net of OPEB plan investment expense, including inflation.
Inflation:	2.75% as of June 30, 2017 and for future periods
Salary Increases:	3.00% annually as of June 30, 2017 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 B

Required Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Plan Membership

Plan Membership: At June 30, 2017, OPEB plan membership consisted of the following

Inactive employees or beneficiaries currently receiving benefits:	29
Active Employees:	<u>47</u>
Total:	76

Changes in Assumptions: Effective June 30, 2017

- Discount rate is 5.25% previously 4.00%

EXHIBIT B

Required Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources Arising between Expected & Actual Experience					
Fiscal Year	Experience Losses	Experience Gains	Amounts recognized in OPEB Expense through June 30, 2018	Balances at June 30, 2018	
				Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	118,520	0	0	118,520	0
Total				118,520	0

EXHIBIT B

Required Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Changes of Assumptions					
Fiscal Year	Increase in the Total OPEB Liability	Decrease in the Total OPEB Liability	Amounts recognized in OPEB Expense through June 30, 2018	Balances at June 30, 2018	
				Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	0	0	0	0	0
Total				0	0

EXHIBIT B

Required Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources between Projected & Actual Earnings on OPEB Plan Investments					
Fiscal Year	Increase in the Total OPEB Liability	Decrease in the Total OPEB Liability	Amounts recognized in OPEB Expense through June 30, 2018	Balances at June 30, 2018	
				Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	3,109	0	0	3,109	0
Total				3,109	0

EXHIBIT B

Required Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB as of June 30, 2018		
	Deferred Outflows of Resources	Deferred Inflows of Resources
I. Differences between actual & expected experience	118,520	0
II. Changes of assumptions	0	0
III. Net difference between projected & actual earnings on OPEB plan investments	<u>3,109</u>	<u>0</u>
IV. Total [I.+II.+III.]	121,629	0
Year ended June 30:		
	2019	22,016
	2020	22,016
	2021	22,016
	2022	22,016
	2023	22,016
	Thereafter	11,549

EXHIBIT BRequired Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)Notes to Required Supplementary Information (Continued):Contributions:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town contributed \$20,000 beyond the pay-as-you-go cost for the period ending on the June 30, 2017 Measurement Date. For the year ending on the June 30, 2017 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$171,732 .

EXHIBIT C

Reconciliation of Plan Participation
(As of the June 30, 2017 Valuation Date)

ACTIVE EMPLOYEES

	<u>June 30, 2017</u>	<u>June 30, 2015</u>
A. Average Age at Hire	38.12	39.54
B. Average Service	<u>10.61</u>	<u>9.09</u>
C. Average Current Age	48.73	48.63

RETIRED EMPLOYEES & DEPENDENTS

	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Retirees		
A. Under Age 65	3	3
B. Age 65 & Over	<u>15</u>	<u>16</u>
C. Total Retirees	18	19
II. Dependents of Retirees		
A. Under Age 65	2	3
B. Age 65 & Over	<u>9</u>	<u>9</u>
C. Total Retirees	11	12
III. Retirees & Dependents		
A. Under Age 65	5	6
B. Age 65 & Over	<u>24</u>	<u>25</u>
C. Total Retirees	29	31

EXHIBIT D

Projected Cash Flows (Open Group) – Partial Funding Approach

Total Medical, Dental & Life Insurance - Partial Funding - 5.25% discount rate

For the Fiscal Year	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 6.33% return	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Excess Employer Payments (beyond claims)	VIII. Total Employer Payments [VI. + VII.]
2018	4,845,052	66,067	4,778,985	1.36%	190,103	171,732	20,000	191,732
2019	5,147,673	101,184	5,046,489	1.97%	185,220	142,983	30,000	172,983
2020	5,457,205	148,836	5,308,369	2.73%	194,811	147,649	40,000	187,649
2021	5,781,126	209,816	5,571,310	3.63%	203,478	164,826	50,000	214,826
2022	6,119,544	284,967	5,834,577	4.66%	214,859	178,536	60,000	238,536
2023	6,469,244	375,187	6,094,057	5.80%	224,632	194,425	70,000	264,425
2024	6,813,942	481,429	6,332,513	7.07%	228,748	220,934	80,000	300,934
2025	7,175,099	604,708	6,570,391	8.43%	247,600	241,631	90,000	331,631
2026	7,535,400	746,102	6,789,298	9.90%	253,560	266,568	100,000	366,568
2027	7,908,651	906,758	7,001,893	11.47%	269,491	288,404	110,000	398,404
2028	8,302,106	1,087,896	7,214,210	13.10%	282,356	300,489	120,000	420,489
2029	8,703,476	1,290,811	7,412,665	14.83%	295,086	325,533	130,000	455,533
2030	9,117,440	1,516,882	7,600,558	16.64%	309,823	348,479	140,000	488,479
2031	9,553,449	1,767,575	7,785,874	18.50%	319,412	357,290	150,000	507,290
2032	9,999,510	2,044,449	7,955,061	20.45%	340,887	391,575	160,000	551,575
2033	10,452,010	2,349,161	8,102,849	22.48%	355,755	422,926	170,000	592,926
2034	10,939,177	2,683,472	8,255,705	24.53%	374,543	430,924	180,000	610,924
2035	11,428,340	3,049,257	8,379,083	26.68%	391,860	450,285	190,000	640,285
2036	11,957,946	3,809,415	8,148,531	31.86%	408,961	473,601	550,000	1,023,601
2037	12,531,490	4,617,691	7,913,799	36.85%	429,351	477,957	550,000	1,027,957
2038	13,065,932	5,477,131	7,588,801	41.92%	448,911	487,803	550,000	1,037,803
2039	13,654,872	6,390,974	7,263,898	46.80%	468,160	514,636	550,000	1,064,636
2040	14,296,943	7,362,663	6,934,280	51.50%	491,074	534,196	550,000	1,084,196
2041	14,993,197	8,395,860	6,597,337	56.00%	514,184	561,978	550,000	1,111,978
2042	15,715,063	9,494,458	6,220,605	60.42%	537,904	596,126	550,000	1,146,126
2043	16,461,745	10,662,598	5,799,147	64.77%	564,397	635,253	550,000	1,185,253
2044	17,216,497	11,904,681	5,311,816	69.15%	592,913	684,767	550,000	1,234,767
2045	18,012,236	13,225,388	4,786,848	73.42%	622,429	722,250	550,000	1,272,250
2046	18,824,376	14,629,695	4,194,681	77.72%	654,436	767,078	550,000	1,317,078
2047	19,686,983	16,122,895	3,564,088	81.90%	690,101	807,135	550,000	1,357,135
2048	20,585,903	17,710,615	2,875,288	86.03%	727,023	852,895	550,000	1,402,895
2049	21,560,456	19,398,837	2,161,619	89.97%	764,968	862,768	550,000	1,412,768

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - 6.50% discount rate increasing at 0.00% per year

For the Fiscal Year	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 6.33% return	III. Net OPEB Liability (Asset) ("NOL") [I. - II.]	IV Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Annual Funding / (Payments)	VIII. Total Employer Payments [VI. + VII.]
2018	4,072,269	66,067	4,006,202	1.62%	140,997	171,732	204,700	376,432
2019	4,332,772	281,328	4,051,444	6.49%	137,374	142,983	204,700	347,683
2020	4,613,509	510,215	4,103,294	11.06%	144,615	147,649	204,700	352,349
2021	4,900,729	753,591	4,147,138	15.38%	151,036	164,826	204,700	369,526
2022	5,201,003	1,012,373	4,188,630	19.46%	159,573	178,536	204,700	383,236
2023	5,511,575	1,287,536	4,224,039	23.36%	166,955	194,425	204,700	399,125
2024	5,815,898	1,580,116	4,235,782	27.17%	169,298	220,934	204,700	425,634
2025	6,132,163	1,891,217	4,240,946	30.84%	183,457	241,631	204,700	446,331
2026	6,445,977	2,222,010	4,223,967	34.47%	187,377	266,568	204,700	471,268
2027	6,768,998	2,573,743	4,195,255	38.02%	199,465	288,404	204,700	493,104
2028	7,110,603	2,947,740	4,162,863	41.46%	209,152	300,489	204,700	505,189
2029	7,456,999	3,345,411	4,111,588	44.86%	218,588	325,533	204,700	530,233
2030	7,812,384	3,768,255	4,044,129	48.23%	229,468	348,479	204,700	553,179
2031	8,189,241	4,217,865	3,971,376	51.50%	236,064	357,290	204,700	561,990
2032	8,569,605	4,695,935	3,873,670	54.80%	252,248	391,575	204,700	596,275
2033	8,951,815	5,204,267	3,747,548	58.14%	263,229	422,926	204,700	627,626
2034	9,365,818	5,744,776	3,621,042	61.34%	277,241	430,924	204,700	635,624
2035	9,782,914	6,319,500	3,463,414	64.60%	290,047	450,285	204,700	654,985
2036	10,231,883	6,930,604	3,301,279	67.74%	302,575	473,601	204,700	678,301
2037	10,722,422	7,580,391	3,142,031	70.70%	317,503	477,957	204,700	682,657
2038	11,191,039	8,271,309	2,919,730	73.91%	331,782	487,803	204,700	692,503
2039	11,701,838	9,005,962	2,695,876	76.96%	345,884	514,636	204,700	719,336
2040	12,255,801	9,787,119	2,468,682	79.86%	362,648	534,196	204,700	738,896
2041	12,854,579	10,617,723	2,236,856	82.60%	379,475	561,978	204,700	766,678
2042	13,473,615	11,500,904	1,972,711	85.36%	396,700	596,126	204,700	800,826
2043	14,110,793	12,439,991	1,670,802	88.16%	416,067	635,253	204,700	839,953
2044	14,751,543	13,438,522	1,313,021	91.10%	436,919	684,767	204,700	889,467
2045	15,421,558	14,500,260	921,298	94.03%	458,529	722,250	204,700	926,950
2046	16,104,240	15,629,206	475,034	97.05%	482,073	767,078	204,700	971,778
2047	16,822,184	16,829,614	(7,430)	100.04%	508,335	807,135	204,700	1,011,835
2048	17,565,447	18,106,008	(540,561)	103.08%	535,445	852,895	0	852,895
2049	18,377,595	19,252,118	(874,523)	104.76%	563,231	862,768	0	862,768

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - 6.50% discount rate and increasing at 3.00% per year

For the Fiscal Year	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 6.33% return	III. Net OPEB Liability (Asset) ("NOL") [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Annual Funding / (Payments)	VIII. Total Employer Payments [VI. + VII.]
2018	4,072,269	66,067	4,006,202	1.62%	148,428	171,732	152,000	323,732
2019	4,332,772	226,986	4,105,786	5.24%	144,615	142,983	156,560	299,543
2020	4,613,509	402,793	4,210,716	8.73%	151,036	147,649	161,257	308,906
2021	4,900,729	594,572	4,306,157	12.13%	190,103	164,826	166,095	330,921
2022	5,201,003	803,480	4,397,523	15.45%	137,374	178,536	171,078	349,614
2023	5,511,575	1,030,750	4,480,825	18.70%	144,615	194,425	176,210	370,635
2024	5,815,898	1,277,698	4,538,200	21.97%	151,036	220,934	181,496	402,430
2025	6,132,163	1,545,728	4,586,435	25.21%	159,573	241,631	186,941	428,572
2026	6,445,977	1,836,339	4,609,638	28.49%	166,955	266,568	192,549	459,117
2027	6,768,998	2,151,129	4,617,869	31.78%	169,298	288,404	198,325	486,729
2028	7,110,603	2,491,801	4,618,802	35.04%	183,457	300,489	204,275	504,764
2029	7,456,999	2,860,173	4,596,826	38.36%	187,377	325,533	210,403	535,936
2030	7,812,384	3,258,182	4,554,202	41.71%	199,465	348,479	216,715	565,194
2031	8,189,241	3,687,894	4,501,347	45.03%	209,152	357,290	223,216	580,506
2032	8,569,605	4,151,510	4,418,095	48.44%	218,588	391,575	229,912	621,487
2033	8,951,815	4,651,378	4,300,437	51.96%	229,468	422,926	236,809	659,735
2034	9,365,818	5,189,999	4,175,819	55.41%	236,064	430,924	243,913	674,837
2035	9,782,914	5,770,040	4,012,874	58.98%	252,248	450,285	251,230	701,515
2036	10,231,883	6,394,343	3,837,540	62.49%	263,229	473,601	258,767	732,368
2037	10,722,422	7,065,936	3,656,486	65.90%	277,241	477,957	266,530	744,487
2038	11,191,039	7,788,046	3,402,993	69.59%	290,047	487,803	274,526	762,329
2039	11,701,838	8,564,111	3,137,727	73.19%	302,575	514,636	282,762	797,398
2040	12,255,801	9,397,793	2,858,008	76.68%	317,503	534,196	291,245	825,441
2041	12,854,579	10,292,995	2,561,584	80.07%	331,782	561,978	299,982	861,960
2042	13,473,615	11,253,872	2,219,743	83.53%	345,884	596,126	308,981	905,107
2043	14,110,793	12,284,852	1,825,941	87.06%	362,648	635,253	318,250	953,503
2044	14,751,543	13,390,651	1,360,892	90.77%	379,475	684,767	327,798	1,012,565
2045	15,421,558	14,576,293	845,265	94.52%	396,700	722,250	337,632	1,059,882
2046	16,104,240	15,847,126	257,114	98.40%	416,067	767,078	347,761	1,114,839
2047	16,822,184	17,208,848	(386,664)	102.30%	436,919	807,135	257,114	1,064,249
2048	17,565,447	18,563,295	(997,848)	105.68%	458,529	852,895	0	852,895
2049	18,377,595	19,738,352	(1,360,757)	107.40%	482,073	862,768	0	862,768

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Town of Wenham

OPEB Projection of Funding Annual Service Cost and Impact on Unfunded Obligation

Total Medical, Dental & Life Insurance - Funding Annual Service Cost - 5.25% discount rate

Measurement Date	I. Total OPEB Liability	II. Service Cost	III. Employer Share of Premiums / Claims including "implicit cost"	IV. Funding Service Cost beyond claims	V. Total Funding Costs [III. + IV.]	VI. Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"	VII. Present Value at 3.00% of Funding Service Cost beyond claims	VIII. Present Value at 3.00% of Total Funding Costs [VI. + VII.]	IX. Fiduciary Net Position at Beginning of year	X. Net OPEB Liability (Asset) [I. - IX.]	XI. Present Value at 3.00% of Net OPEB Liability (Asset)
June 30, 2017	4,845,052	190,103	171,732	18,371	190,103	171,732	18,371	190,103	66,067	4,778,985	4,778,985
June 30, 2018	5,147,673	185,220	142,983	42,237	185,220	138,818	41,007	179,825	87,907	5,059,766	4,912,394
June 30, 2019	5,457,205	194,811	147,649	47,162	194,811	139,173	44,455	183,628	134,759	5,322,446	5,016,916
June 30, 2020	5,781,126	203,478	164,826	38,652	203,478	150,839	35,372	186,211	188,996	5,592,130	5,117,591
June 30, 2021	6,119,544	214,859	178,536	36,323	214,859	158,627	32,273	190,900	237,570	5,881,974	5,226,058
June 30, 2022	6,469,244	224,632	194,425	30,207	224,632	167,713	26,057	193,770	286,365	6,182,879	5,333,406
June 30, 2023	6,813,942	228,748	220,934	7,814	228,748	185,029	6,544	191,573	331,606	6,482,336	5,428,854
June 30, 2024	7,175,099	247,600	241,631	5,969	247,600	196,468	4,853	201,321	356,829	6,818,270	5,543,877
June 30, 2025	7,535,400	253,560	266,568	(13,008)	253,560	210,431	(10,269)	200,162	381,532	7,153,868	5,647,329
June 30, 2026	7,908,651	269,491	288,404	(18,913)	269,491	221,038	(14,495)	206,543	388,554	7,520,097	5,763,528
June 30, 2027	8,302,106	282,356	300,489	(18,133)	282,356	223,592	(13,493)	210,099	390,040	7,912,066	5,887,320
June 30, 2028	8,703,476	295,086	325,533	(30,447)	295,086	235,172	(21,996)	213,176	392,384	8,311,092	6,004,110
June 30, 2029	9,117,440	309,823	348,479	(38,656)	309,823	244,416	(27,113)	217,303	382,537	8,734,903	6,126,485
June 30, 2030	9,553,449	319,412	357,290	(37,878)	319,412	243,297	(25,793)	217,504	363,964	9,189,485	6,257,592
June 30, 2031	9,999,510	340,887	391,575	(50,688)	340,887	258,877	(33,511)	225,366	345,194	9,654,316	6,382,640
June 30, 2032	10,452,010	355,755	422,926	(67,171)	355,755	271,460	(43,115)	228,345	312,629	10,139,381	6,508,083
June 30, 2033	10,939,177	374,543	430,924	(56,381)	374,543	268,538	(35,135)	233,403	261,871	10,677,306	6,653,744
June 30, 2034	11,428,340	391,860	450,285	(58,425)	391,860	272,430	(35,348)	237,082	219,238	11,209,102	6,781,691
June 30, 2035	11,957,946	408,961	473,601	(64,640)	408,961	278,191	(37,969)	240,222	172,323	11,785,623	6,922,811
June 30, 2036	12,531,490	429,351	477,957	(48,606)	429,351	272,572	(27,719)	244,853	116,730	12,414,760	7,079,964
June 30, 2037	13,065,932	448,911	487,803	(38,892)	448,911	270,085	(21,534)	248,551	74,252	12,991,680	7,193,178
June 30, 2038	13,654,872	468,160	514,636	(46,476)	468,160	276,642	(24,983)	251,659	39,258	13,615,614	7,319,063
June 30, 2039	14,296,943	491,074	534,196	(43,122)	491,074	278,793	(22,505)	256,288	0	14,296,943	7,461,467
June 30, 2040	14,993,197	514,184	561,978	(47,794)	514,184	284,750	(24,217)	260,533	0	14,993,197	7,596,929
June 30, 2041	15,715,063	537,904	596,126	(58,222)	537,904	293,254	(28,641)	264,613	0	15,715,063	7,730,770
June 30, 2042	16,461,745	564,397	635,253	(70,856)	564,397	303,400	(33,841)	269,559	0	16,461,745	7,862,221
June 30, 2043	17,216,497	592,913	684,767	(91,854)	592,913	317,523	(42,592)	274,931	0	17,216,497	7,983,199
June 30, 2044	18,012,236	622,429	722,250	(99,821)	622,429	325,149	(44,938)	280,211	0	18,012,236	8,108,912
June 30, 2045	18,824,376	654,436	767,078	(112,642)	654,436	335,272	(49,233)	286,039	0	18,824,376	8,227,697
June 30, 2046	19,686,983	690,101	807,135	(117,034)	690,101	342,505	(49,663)	292,842	0	19,686,983	8,354,100
June 30, 2047	20,585,903	727,023	852,895	(125,872)	727,023	351,381	(51,858)	299,523	0	20,585,903	8,481,119

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical & Life Insurance - Partial Funding

Measurement Date	Number of Retirees, Spouses & Surviving Spouses	Total OPEB Liability	Present Value at 3.00% of Total OPEB Liability	Employer Share of Premiums / Claims including "implicit cost"	Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"
June 30, 2017	29	4,845,052	4,845,052	171,732	171,732
June 30, 2018	32	5,147,673	4,997,741	142,983	138,818
June 30, 2019	33	5,457,205	5,143,939	147,649	139,173
June 30, 2020	33	5,781,126	5,290,549	164,826	150,839
June 30, 2021	34	6,119,544	5,437,136	178,536	158,627
June 30, 2022	35	6,469,244	5,580,427	194,425	167,713
June 30, 2023	38	6,813,942	5,706,569	220,934	185,029
June 30, 2024	39	7,175,099	5,834,012	241,631	196,468
June 30, 2025	40	7,535,400	5,948,514	266,568	210,431
June 30, 2026	41	7,908,651	6,061,322	288,404	221,038
June 30, 2027	42	8,302,106	6,177,547	300,489	223,592
June 30, 2028	43	8,703,476	6,287,576	325,533	235,172
June 30, 2029	44	9,117,440	6,394,789	348,479	244,416
June 30, 2030	45	9,553,449	6,505,434	357,290	243,297
June 30, 2031	45	9,999,510	6,610,854	391,575	258,877
June 30, 2032	46	10,452,010	6,708,747	422,926	271,460
June 30, 2033	47	10,939,177	6,816,933	430,924	268,538
June 30, 2034	47	11,428,340	6,914,334	450,285	272,430
June 30, 2035	47	11,957,946	7,024,033	473,601	278,191
June 30, 2036	47	12,531,490	7,146,534	477,957	272,572
June 30, 2037	47	13,065,932	7,234,290	487,803	270,085
June 30, 2038	47	13,654,872	7,340,167	514,636	276,642
June 30, 2039	47	14,296,943	7,461,467	534,196	278,793
June 30, 2040	47	14,993,197	7,596,929	561,978	284,750
June 30, 2041	47	15,715,063	7,730,770	596,126	293,254
June 30, 2042	47	16,461,745	7,862,221	635,253	303,400
June 30, 2043	47	17,216,497	7,983,199	684,767	317,523
June 30, 2044	47	18,012,236	8,108,912	722,250	325,149
June 30, 2045	48	18,824,376	8,227,697	767,078	335,272
June 30, 2046	48	19,686,983	8,354,100	807,135	342,505
June 30, 2047	48	20,585,903	8,481,119	852,895	351,381
June 30, 2048	48	21,560,456	8,623,905	862,768	345,096
June 30, 2049	48	22,602,763	8,777,490	886,308	344,186
June 30, 2050	48	23,707,651	8,938,407	932,435	351,552
June 30, 2051	48	24,881,300	9,107,673	954,693	349,461
June 30, 2052	48	26,206,546	9,313,371	983,274	349,439
June 30, 2053	48	27,529,537	9,498,583	1,032,470	356,236
June 30, 2054	48	28,922,359	9,688,497	1,085,023	363,464
June 30, 2055	48	30,398,314	9,886,327	1,129,725	367,416
June 30, 2056	48	32,060,547	10,123,231	1,185,409	374,297

EXHIBIT F**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.

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

GASB - Government Accounting Standards Board. "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 post employment benefits.

EXHIBIT F**GLOSSARY***(continued)*

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

Other Post Employment 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.