

**Town of Foxborough 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 date of

June 30, 2018

Delivered October 2017

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October 19, 2017

Personal and Confidential

Mr. William R. Scollins, III
Finance Director/Town Accountant
Town of Foxborough
40 South Street
Foxborough, MA 02035

Dear Mr. Scollins:

We have performed an actuarial valuation of the Town of Foxborough 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 Foxborough, 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

October 19, 2017ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Foxborough 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

SECTION I
PRINCIPAL RESULTS OF THE VALUATION

Town of Foxborough
Assuming Full Funding - 7.00% discount rate
Comparison of Plan Liabilities to Prior Valuation

	<u>As of the Measurement Date</u>	
	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Present Value of Future Benefits		
A. Actives	27,459,154	24,525,358
B. Retirees/Disabled	<u>12,864,966</u>	<u>11,217,363</u>
C. Total	40,324,120	35,742,721
II. Present Value of Future Normal Cost	6,840,591	8,490,335
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	20,618,563	16,035,023
B. Retirees/Disabled	<u>12,864,966</u>	<u>11,217,363</u>
C. Total	33,483,529	27,252,386
IV. Fiduciary Net Position	6,888,077	4,578,158
V. Net OPEB Liability (Asset) [III. - IV.]	26,595,452	22,674,228
VI. Funded Ratio [IV. / III.]	20.57%	16.80%
VII. Annual Covered Payroll	41,776,289	36,586,631
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	63.7%	62.0%
IX. Number of Eligible Participants		
A. Actives	638	606
B. Retirees/Disabled	<u>352</u>	<u>332</u>
C. Total	990	938
	<u>For the Reporting Date and Fiscal Year Ending June 30, 2018</u>	<u>June 30, 2016</u>
X. Service Cost	925,445	994,399
XI. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	1,974,023	N/A
XII. Deferred (Inflows)/Outflows from Plan Design Changes	0	N/A
XIII. Deferred (Inflows)/Outflows from Expected & Actual Experience	0	N/A
XIV. Deferred (Inflows)/Outflows from Changes in Assumptions	0	N/A
XV. Projected Earning on OPEB plan investments	(689)	N/A
XVI. Deferred (Inflows)/Outflows from Earnings on Investments	(20,060)	N/A
XVII. Employer Share of Costs	(1,382,116)	(1,138,855)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(964,069)	(664,069)
XIX. Total Employer Contribution [XVII. + XVIII.]	(2,346,185)	(1,802,924)
XX. Other Changes	0	N/A
XXI. Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XVI.+XIX.+XX.]	532,534	N/A
XXII. Discount Rate	7.00%	7.00%

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Foxborough
Assuming Full Funding - 7.00% 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	26,946,805	0	80,420	431,929	27,459,154
B. Retirees/Disabled	<u>12,691,619</u>	<u>0</u>	<u>142,717</u>	<u>30,630</u>	<u>12,864,966</u>
C. Total	39,638,424	0	223,137	462,559	40,324,120
II. Present Value of Future Normal Cost	6,602,897	0	14,032	223,662	6,840,591
III. Total OPEB Liability					
A. Actives	20,343,908	0	66,388	208,267	20,618,563
B. Retirees/Disabled	<u>12,691,619</u>	<u>0</u>	<u>142,717</u>	<u>30,630</u>	<u>12,864,966</u>
C. Total	33,035,527	0	209,105	238,897	33,483,529
IV. Fiduciary Net Position	6,795,916	0	43,016	49,145	6,888,077
V. Net OPEB Liability (Asset) [III. - IV.]	26,239,611	0	166,089	189,752	26,595,452
VI. Annual Covered Payroll	41,776,289	41,776,289	41,776,289	41,776,289	41,776,289
VII. Net OPEB Liability (Asset) as % of Covered Payroll	62.8%	0.0%	0.4%	0.5%	63.7%
VIII. Number of Eligible Participants					
IX. A. Actives	638	638	638	638	
B. Retirees/Disabled	<u>352</u>	<u>0</u>	<u>224</u>	<u>352</u>	
C. Total	990	638	862	990	
For the Reporting Date and Fiscal Year Ending June 30, 2018					
X. Service Cost	905,149	0	2,290	18,006	925,445
XI. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	1,947,229	0	12,250	14,544	1,974,023
XII. Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XIII. Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0	0	0	0
XIV. Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0
XV. Projected Earning on OPEB plan investments	(679)	0	(5)	(5)	(689)
XVI. Deferred (Inflows)/Outflows from Earnings on Investments	(19,793)	0	(124)	(143)	(20,060)
XVII. Employer Share of Costs	(1,368,674)	0	(13,442)	0	(1,382,116)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(951,827)	0	(5,692)	(6,550)	(964,069)
XIX. Total Employer Contribution [XVII. + XVIII.]	(2,320,501)	0	(19,134)	(6,550)	(2,346,185)
XX. Other Changes	0	0	0	0	0
XXI. Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.+XIX.+XX.]	511,405	0	(4,723)	25,852	532,534

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Foxborough

Plan Liabilities as of the June 30, 2017 Measurement Date

Assuming Full Funding

	Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Water Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Government Activities	Business-Type Activities	Total
I. Present Value of Future Benefits								
A. Actives	2,129,661	20,376,624	4,166,860	629,413	156,596	26,673,145	786,009	27,459,154
B. Retirees/Disabled	<u>2,089,787</u>	<u>9,058,365</u>	<u>1,427,729</u>	<u>289,085</u>	<u>0</u>	<u>12,575,881</u>	<u>289,085</u>	<u>12,864,966</u>
C. Total	4,219,448	29,434,989	5,594,589	918,498	156,596	39,249,026	1,075,094	40,324,120
II. Present Value of Future Normal Cost	115,348	5,308,246	1,278,310	76,878	61,809	6,701,904	138,687	6,840,591
III. Total OPEB Liability								
A. Actives	2,014,313	15,068,378	2,888,550	552,535	94,787	19,971,241	647,322	20,618,563
B. Retirees/Disabled	<u>2,089,787</u>	<u>9,058,365</u>	<u>1,427,729</u>	<u>289,085</u>	<u>0</u>	<u>12,575,881</u>	<u>289,085</u>	<u>12,864,966</u>
C. Total	4,104,100	24,126,743	4,316,279	841,620	94,787	32,547,122	936,407	33,483,529
IV. Fiduciary Net Position	845,678	4,961,195	888,469	173,109	19,627	6,695,342	192,735	6,888,077
V. Net OPEB Liability (Asset) [III. - IV.]	3,258,422	19,165,548	3,427,810	668,511	75,160	25,851,780	743,672	26,595,452
VI. Annual Covered Payroll	5,245,443	29,709,972	5,530,383	972,519	317,972	#NAME?	1,290,491	41,776,289
VII. Net OPEB Liability (Asset) as % of Covered Payroll	62.1%	64.5%	62.0%	68.7%	23.6%	#NAME?	57.6%	63.7%
VIII. Number of Eligible Participants								
A. Actives	82	470	68	14	4	620	18	638
B. Retirees/Disabled	<u>59</u>	<u>259</u>	<u>29</u>	<u>5</u>	<u>0</u>	<u>347</u>	<u>5</u>	<u>352</u>
C. Total	141	729	97	19	4	967	23	990
For the Reporting Date and Fiscal Year Ending June 30, 2018								
IX. Service Cost	114,070	673,269	117,705	12,768	7,633	905,044	20,401	925,445
X. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	242,672	1,423,930	252,574	49,035	5,812	1,919,176	54,847	1,974,023
XI. Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0	0	0	0
XII. Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0	0	0	0	0	0	0
XIII. Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0	0	0	0
XIV. Projected Earning on OPEB plan investments	(84)	(496)	(90)	(17)	(2)	(670)	(19)	(689)
XV. Deferred (Inflows)/Outflows from Earnings on Investments	(2,465)	(14,448)	(2,587)	(503)	(57)	(19,500)	(560)	(20,060)
XVI. Employer Share of Costs	(191,694)	(1,023,344)	(127,558)	(39,093)	(427)	(1,342,596)	(39,520)	(1,382,116)
XVII. Employer (Payments)/Withdrawals to/from OPEB Trust	(118,167)	(694,665)	(124,276)	(24,232)	(2,729)	(937,108)	(26,961)	(964,069)
XVIII. Total Employer Contribution [XVI. + XVII.]	(309,861)	(1,718,009)	(251,834)	(63,325)	(3,156)	(2,279,704)	(66,481)	(2,346,185)
XIX. Other Changes	0	0	0	0	0	0	0	0
XX. Net OPEB Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.+XVIII.+XIX.]	44,332	364,246	115,768	(2,042)	10,230	524,346	8,188	532,534

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Foxborough
Detail of Plan Liabilities by Group and Dependency Status
Assuming Full Funding - 7.00% 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	8,918,599	4,691,210	193,185
B. Spouses	<u>4,350,783</u>	<u>2,273,967</u>	<u>92,805</u>
C. Total	13,269,382	6,965,177	285,990
Age 65 and Over			
A. Participants	5,234,740	9,052,347	422,633
B. Spouses	<u>8,955,032</u>	<u>4,601,039</u>	<u>216,822</u>
C. Total	14,189,772	13,653,386	639,455
Actives Total			
A. Participants	14,153,339	13,743,557	615,818
B. Spouses	<u>13,305,815</u>	<u>6,875,006</u>	<u>309,627</u>
C. Total	27,459,154	20,618,563	925,445
Retirees/Disabled			
Under Age 65			
A. Participants	799,721	799,721	0
B. Spouses	<u>188,546</u>	<u>188,546</u>	<u>0</u>
C. Total	988,267	988,267	0
Age 65 and Over			
A. Participants	11,484,105	11,484,105	0
B. Spouses	<u>392,594</u>	<u>392,594</u>	<u>0</u>
C. Total	11,876,699	11,876,699	0
Retirees/Disabled Total			
A. Participants	12,283,826	12,283,826	0
B. Spouses	<u>581,140</u>	<u>581,140</u>	<u>0</u>
C. Total	12,864,966	12,864,966	0
Total Population			
A. Participants	26,437,165	26,027,383	615,818
B. Spouses	<u>13,886,955</u>	<u>7,456,146</u>	<u>309,627</u>
C. Total	40,324,120	33,483,529	925,445

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.

3. Summary of Results:

Plan experience was in line with expectation - for the year ending on the Measurement Date June 30, 2017, the Plan saw an experience gain of \$100,301 or 0.38%. This was due to assets performing more favorably than expected. The actuarial experience gain is amortized into the net OPEB expense over time until fully recognized.

Commentary on Plan Experience and Contribution Amounts
(continued)

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

	June 30, 2017	June 30, 2015
Total OPEB Liability	\$33,483,529	\$27,252,386
Fiduciary Net Position	\$6,888,077	\$4,578,158
Net OPEB Liability	\$26,595,452	\$22,674,228
Funded Ratio	20.57%	16.80%

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

	June 30, 2018	June 30, 2016
Service Cost	\$925,445	\$994,399
Interest Expense	\$1,974,023	N/A
(Inflow)/Outflow from Plan Design Changes	\$0	N/A
(Inflow)/Outflow from Plan Experience	\$0	N/A
(Inflow)/Outflow from Changes in Assumptions	\$0	N/A
Projected Investment Earnings	\$(689)	N/A
(Inflow)/Outflow from Earnings on Investments	\$(20,060)	N/A
Employer Share of Costs	\$(1,382,116)	\$(1,138,855)
Employer Payments (Withdrawals) to/from Trust	\$(964,069)	\$(664,069)
Total Employer Payments	\$(2,346,185)	\$(1,802,924)
Other Changes	\$0	N/A
Net OPEB Expense	\$532,534	N/A
Interest Rate	7.00%	7.00%

Commentary on Plan Experience and Contribution Amounts
(continued)

5. **Implicit Subsidy:**

The implicit subsidy arises because pre-Medicare retirees 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		
	As Of The Measurement Date	
Impact on Liability	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Actuarial Accrued Liability	33,483,529	27,252,386
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>29,768,906</u>	<u>N/A</u>
III. Liability from Implicit Subsidy [I. - II.]	3,714,623	N/A

	For The Fiscal Year Ending	
Impact on Payments	<u>June 30, 2018</u>	<u>June 30, 2016</u>
IV. Employer Payments (Including Implicit Subsidy)	1,382,116	1,138,855
V. Actual Employer Payments	<u>1,207,989</u>	<u>N/A</u>
VI. Implicit Subsidy [IV. - V.]	174,127	N/A

SECTION II

SUMMARY OF PLAN PROVISIONS

<u>Effective Date</u>	GASB 45 is adopted July 1, 2008 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 50% of stated premiums for medical insurance and 50% of stated premiums for life insurance and 100% of premiums for dental insurance. Surviving Spouses will pay 100% of premiums for Medical Insurance.
<u>Benefits Offered</u>	Various Medical offerings via Blue Cross Blue Shield of Massachusetts as well as 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 (6.91 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 IIIACTUARIAL 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

Discount Rate

7.00% per annum (previously 7.00%)

Long Term Rate of Return

7.01% (based on investment policy)

Municipal Bond Rate

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

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

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%	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 for non-teachers

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)

C. ACTUARIAL ASSUMPTIONS (continued)

Retirement Rates for teachers

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

<u>Age</u>	<u>Male Teachers</u>	<u>Female Teachers</u>
45	0.00%	0.00%
46	0.00%	0.00%
47	0.00%	0.00%
48	0.00%	0.00%
49	0.00%	0.00%
50	2.00%	1.50%
51	2.00%	1.50%
52	2.00%	1.50%
53	2.00%	1.50%
54	2.00%	2.00%
55	6.00%	5.00%
56	20.00%	15.00%
57	40.00%	35.00%
58	50.00%	35.00%
59	50.00%	35.00%
60	40.00%	35.00%
61	40.00%	35.00%
62	35.00%	35.00%
63	35.00%	35.00%
64	35.00%	35.00%
65	35.00%	35.00%
66	40.00%	35.00%
67	40.00%	30.00%
68	40.00%	30.00%
69	40.00%	30.00%
70	100.00%	100.00%
71	100.00%	100.00%
72	100.00%	100.00%

In the absence of census data specifying which employees are teachers it was assumed that two thirds of school employees are teachers.

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
Network Blue HMO	166		298	464
Blue Care Elect PPO	8		5	13
Managed Blue for Seniors	16			16
Medex II	260			260
Total	450	0	303	753

	Per Contract Costs (monthly) - FY 2018		
	Single	Two-Person	Family
Network Blue HMO	766.00	0.00	1,980.56
Blue Care Elect PPO	934.78	0.00	2,416.70
Managed Blue for Seniors	297.77	595.54	
Medex II	385.29	770.58	

Gross Expected FY 2018 Incurred Premiums	10,102,372
Adjustment to reflect children's claims	(1,636,879)
Total Expected FY 2018 Incurred Premiums (adults only)	8,465,493

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	12,790	3,823
Average Age	12,215	4,563

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	7,847	3,284	3,284
25 to 29	1.312	0.591	7,847	3,535	177,373
30 to 34	1.312	0.712	7,847	4,258	450,136
35 to 39	1.312	0.850	7,847	5,084	585,542
40 to 44	1.312	1.000	7,847	5,981	563,216
45 to 49	1.456	1.193	8,708	7,135	697,092
50 to 54	1.599	1.441	9,564	8,619	915,765
55 to 59	1.740	1.753	10,407	10,485	992,331
60 to 64	1.968	2.102	11,771	12,572	1,151,086
65 to 69	2.168	2.316	12,967	13,852	675,785
70 & Over	2.396	2.557	14,330	15,293	<u>88,869</u>
Total					6,300,479

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	7,847	5,981	7,847
45 to 49	1.456	1.193	8,708	7,135	15,843
50 to 54	1.599	1.441	9,564	8,619	46,875
55 to 59	1.740	1.753	10,407	10,485	62,598
60 to 64	1.968	2.102	11,771	12,572	531,541
65 to 69	2.168	2.316	12,967	13,852	39,786
70 to 74	2.396	2.557	14,330	15,293	87,906
75 to 79	2.593	2.769	15,509	16,561	47,579
80 to 84	2.724	2.910	16,292	17,405	16,292
85 to 89	2.864	3.059	17,130	18,296	35,426
90 & Over	3.010	3.215	18,003	19,229	<u>0</u>
Total					891,693

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	3,876	4,140	286,728
70 to 74	2.396	2.557	4,283	4,571	366,145
75 to 79	2.593	2.769	4,635	4,950	278,280
80 to 84	2.724	2.910	4,869	5,202	179,946
85 to 89	2.864	3.059	5,120	5,468	89,824
90 & Over	3.010	3.215	5,381	5,747	<u>72,149</u>
Total					1,273,072
Grand Totals					8,465,244

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 & Medicare Supplement coverages through Blue Cross Blue Shield of Massachusetts.
- b. Administrator: Town of Foxborough
- 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 will pay 50% of premiums. Surviving Spouses will pay 100% of premiums.

2. A DESCRIPTION OF THE RETIREE DENTAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Dental Insurance
- b. Administrator: Town of Foxborough
- 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 - \$3,000
- b. Administrator: Town of Foxborough
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 50% of premiums in retirement.

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	50%	50%
Dental	100%	100%
Life	50%	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 2018 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$1,382,116. The Town is also projected to make a contribution to an OPEB Trust of \$964,069 for the 2018 fiscal year for a total contribution of \$2,346,185.

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 Statement.

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	22.50%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	16.50%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	13.00%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	7.50%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	22.00%	Domestic Fixed Income	2.00%
International Fixed Income	3.00%	International Fixed Income	3.00%
Alternatives	15.00%	Alternatives	6.50%
Real Estate	0.00%	Real Estate	6.25%
Cash	0.50%	Cash	0.00%
Total	100.00%		
		I. Real Rate of Return	4.51%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	7.26%
		IV. Investment Expense	0.25%
		V. Net Investment Return* [III.-IV.]	7.01%

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	925,445
II. 30 year amortization of NOL at 7.00%	<u>2,003,020</u>
III. Actuarial Determined Contribution [I. + II.]	2,928,465
IV. Contributions in relation to the actuarially determined contribution	<u>(2,346,185)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>582,280</u>
Covered employee payroll	41,776,289
Contributions as a % of covered employee payroll	5.62%

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 20.57% funded. The Total OPEB Liability (TOL) for benefits was \$33,483,529, and the Fiduciary Net Position was \$6,888,077, resulting in a Net OPEB Liability (NOL) of \$26,595,452. The covered payroll (annual payroll of active employees covered by the plan) was \$ 41,776,289 and the ratio of the NOL to the covered payroll was 63.7%.

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.)	\$9,952,118	\$37,112,310	\$27,160,192	26.8%	\$44,320,465	61.3%
06/30/2018 (est.)	\$8,368,219	\$35,387,932	\$27,019,713	23.7%	\$43,029,578	62.8%
06/30/2017	\$6,888,077	\$33,483,529	\$26,595,452	20.6%	\$41,776,289	63.7%
06/30/2016	\$5,503,017	\$29,005,480	\$23,502,463	19.0%	\$37,684,230	62.4%
06/30/2015	\$4,620,298	\$27,252,386	\$22,632,088	17.0%	\$36,586,631	61.9%
06/30/2014	\$3,797,658	\$36,092,116	\$32,294,458	10.5%	\$35,821,857	90.2%

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	2,092,055	1,722,019
VIII. Stocks	4,979,090	4,098,406
IX. Cash and cash equivalents	41,841	34,440
X. Real estate	0	0
XI. Alternative investments	<u>1,255,233</u>	<u>1,033,212</u>
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	<u>8,368,219</u>	<u>6,888,077</u>
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
Total Assets	8,368,219	6,888,077
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.]	8,368,219	6,888,077

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	964,069
Total Contributions	964,069
<u>Investment Income / (loss)</u>	
Interest	86,101
Dividends	81,968
Equity fund income, net	0
Net increase in fair value of investments	348,004
Securities lending income	0
Less investment expenses:	
Direct investment expense	0
Securities lending management fees	0
Securities lending borrower rebates	0
Net investment income	516,073
Other income	0
Total Additions	<u>1,480,142</u>
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Total deductions	<u>0</u>
Net increase (decrease)	1,480,142
Net Position restricted for OPEB	
Beginning of year	<u>6,888,077</u>
End of year	8,368,219

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	School Employees and Retirees	Police Employees and Retirees	Water Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Government Activities	Business-Type Activities	
I. Total OPEB Liability	4,104,100	24,126,743	4,316,279	841,620	94,787	32,547,122	936,407	33,483,529
II. Fiduciary Net Position as of June 30, 2017	845,678	4,961,195	888,469	173,109	19,627	6,695,342	192,735	6,888,077
III. Net OPEB Liability (Asset) [I.-II.]	3,258,422	19,165,548	3,427,810	668,511	75,160	25,851,780	743,672	26,595,452
IV. Service Cost	114,070	673,269	117,705	12,768	7,633	905,044	20,401	925,445
V. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	242,672	1,423,930	252,574	49,035	5,812	1,919,176	54,847	1,974,023
VI. Deferred (Inflows)/Outflows from Plan Design Changes	-	-	-	-	-	-	-	-
VII. Deferred (Inflows)/Outflows from Plan Experience	-	-	-	-	-	-	-	-
VIII. Deferred (Inflows)/Outflows from Changes in Assumptions	-	-	-	-	-	-	-	-
IX. Projected Earnings on OPEB plan investments	(84)	(496)	(90)	(17)	(2)	(670)	(19)	(689)
X. Deferred (Inflows)/Outflows from Earnings on Investments	(2,465)	(14,448)	(2,587)	(503)	(57)	(19,500)	(560)	(20,060)
XI. Employer Share of Costs	(191,694)	(1,023,344)	(127,558)	(39,093)	(427)	(1,342,596)	(39,520)	(1,382,116)
XII. Employer Payments (Withdrawals) to/from OPEB Trust	(118,167)	(694,665)	(124,276)	(24,232)	(2,729)	(937,108)	(26,961)	(964,069)
XIII. Total Employer Contribution [X.+XI.]	(309,861)	(1,718,009)	(251,834)	(63,325)	(3,156)	(2,279,704)	(66,481)	(2,346,185)
XIV. Net OPEB Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.+XIII.]	44,332	364,246	115,768	(2,042)	10,230	524,346	8,188	532,534
XV. Actuarial Determined Contribution (ADC)	358,944	2,110,122	377,501	73,608	8,290	2,846,567	81,898	2,928,465
XVI. Total Expected Contribution	309,861	1,718,009	251,834	63,325	3,156	2,279,704	66,481	2,346,185
XVII. Percentage of ADC Contributed [XVI./XV.]	86%	81%	67%	86%	38%	80%	81%	80%

EXHIBIT A

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

11. 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 Net OPEB Liability would increase to \$36,340,723 or by 36.6% and the corresponding Service Cost would increase to \$1,391,562 or by 50.4%. If such healthcare trend rates were 1% less than forecast and employee contributions were to increase at the forecast rate, the Net OPEB Liability would decrease to \$18,682,667 or by 29.8% and the corresponding Service Cost would decrease to \$573,747 or by 38.0%.

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>
Net OPEB Liability	18,682,667	26,595,452	36,340,723
Service Cost	573,747	925,445	1,391,562

12. EFFECT OF 1% CHANGE IN DISCOUNT RATES

If the discount rate were 1% higher than what was used in this valuation, the Net OPEB Liability would decrease to \$21,980,911 or by 17.4% and the corresponding Service Cost would decrease to \$678,652 or by 26.7%. If the discount rate were 1% lower than was used in this valuation, the Net OPEB Liability would increase to \$31,209,993 or by 17.4% and the corresponding Service Cost would increase to \$1,172,238 or by 26.7%.

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

	<u>1% Decrease (6.00%)</u>	<u>Current Discount Rate (7.00%)</u>	<u>1% Increase (8.00%)</u>
Net OPEB Liability	31,209,993	26,595,452	21,980,911
Service Cost	1,172,238	925,445	678,652

EXHIBIT A

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

13. 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: 7.00% per annum (previously 7.00%)
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 Foxborough 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	925,445
II. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	1,974,023
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	(689)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	(20,060)
VIII. Total Employer Contributions	(2,346,185)
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.]	532,534

* Recognized Immediately

** Amortized over 6.91 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	29,005,480	5,503,017	23,502,463
II. Change in Assumptions for GASB 75	<u>2,698,235</u>	<u>0</u>	<u>2,698,235</u>
III. Balances at June 30, 2016 GASB 75 [I. + II.]	31,703,715	5,503,017	26,200,698
Changes for the year:			
IV. Service Cost	925,445	0	925,445
V. Interest on Net OPEB Liability, Service Cost, and Benefit Payments	2,236,485	385,211	1,851,274
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	0	100,301	(100,301)
IX. Net Investment Income	0	35,479	(35,479)
X. Employer Contributions to Trust	0	2,246,185	(2,246,185)
XI. Benefit Payments Withdrawn from Trust	0	(1,382,116)	1,382,116
XII. Benefit payments excluding Implicit Cost	(1,207,989)	0	(1,207,989)
XIII. Implicit Cost amount	(174,127)	0	(174,127)
XIV. Total Benefit payments including Implicit Cost [XII. + XIII.]	(1,382,116)	0	(1,382,116)
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>1,779,814</u>	<u>1,385,060</u>	<u>(987,362)</u>
XVII. Balances at June 30, 2017 [III.+XVII.]	33,483,529	6,888,077	26,595,452

* Recognized Immediately

** Amortized over 6.91 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	2,092,055	1,722,019
Stocks	4,979,090	4,098,406
Cash and cash equivalents	41,841	34,440
Real estate	0	0
Alternative investments	1,255,233	1,033,212
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	8,368,219	6,888,077
* 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
Beginning value - July 1, 2016	5,503,017	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	431,069	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	0	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	433,000	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
June	0	0	0.0000
Ending value - June 30, 2017	6,888,077		
Money Weighted Rate of Return	8.79%		
Asset Value - June 30, 2017	6,888,077		

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	964,069
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	964,069
* 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	6,888,077
II. Aggregate external cash flows	964,069
III. Net investment income	<u>516,073</u>
IV. Total OPEB plan investments, end of year [I.+II.+III.]	<u>8,368,219</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	41,776,289	0	41,776,289	0	1,382,116	0	1,382,116
2019	38,892,208	4,137,370	43,029,578	0	1,506,462	0	1,506,462
2020	36,530,358	7,790,107	44,320,465	0	1,686,288	0	1,686,288
2021	34,291,209	11,358,870	45,650,079	0	1,833,645	0	1,833,645
2022	32,402,076	14,617,505	47,019,581	0	1,936,743	0	1,936,743
2023	30,543,709	17,886,459	48,430,168	0	2,007,913	0	2,007,913
2024	28,980,185	20,902,888	49,883,073	0	2,139,602	0	2,139,602
2025	27,459,721	23,919,844	51,379,565	0	2,296,195	0	2,296,195
2026	25,833,912	27,087,040	52,920,952	0	2,396,492	0	2,396,492
2027	24,295,773	30,212,808	54,508,581	0	2,575,562	0	2,575,562
2028	22,729,528	33,414,310	56,143,838	0	2,732,956	0	2,732,956
2029	21,315,700	36,512,453	57,828,153	0	2,827,545	19,172	2,846,717
2030	19,981,479	39,581,519	59,562,998	0	2,902,357	50,163	2,952,520
2031	18,769,774	42,580,114	61,349,888	0	3,042,681	96,047	3,138,728
2032	17,735,871	45,454,514	63,190,385	0	3,107,410	158,300	3,265,710
2033	16,667,482	48,418,615	65,086,097	0	3,177,749	233,923	3,411,672
2034	15,556,851	51,481,829	67,038,680	0	3,300,725	294,407	3,595,132
2035	14,556,762	54,493,078	69,049,840	0	3,387,157	364,057	3,751,214
2036	13,609,065	57,512,270	71,121,335	0	3,485,372	442,979	3,928,351
2037	12,687,206	60,567,769	73,254,975	0	3,609,549	507,502	4,117,051
2038	11,836,107	63,616,517	75,452,624	0	3,702,302	579,712	4,282,014
2039	11,047,267	66,668,936	77,716,203	0	3,788,229	682,527	4,470,756
2040	10,291,888	69,755,801	80,047,689	0	3,951,389	818,549	4,769,938
2041	9,509,467	72,939,653	82,449,120	0	4,043,228	989,588	5,032,816
2042	8,741,589	76,181,005	84,922,594	0	4,107,454	1,200,448	5,307,902
2043	7,969,738	79,500,534	87,470,272	0	4,195,529	1,444,496	5,640,025
2044	7,197,170	82,897,210	90,094,380	0	4,177,499	1,653,186	5,830,685
2045	6,463,144	86,334,067	92,797,211	0	4,158,611	1,886,494	6,045,105
2046	5,694,534	89,886,593	95,581,127	0	4,187,503	2,144,384	6,331,887
2047	4,966,083	93,482,478	98,448,561	0	4,198,970	2,379,065	6,578,035
2048	4,270,348	97,131,670	101,402,018	0	4,131,067	2,635,253	6,766,320
2049	3,541,918	100,902,161	104,444,079	0	4,086,304	2,936,409	7,022,713

EXHIBIT A

Financial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(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	6,888,077	1,382,116	1,382,116	0	964,069	964,069	516,073	8,368,219
2019	8,368,219	1,506,462	1,506,462	0	964,069	871,372	619,830	9,859,421
2020	9,859,421	1,686,288	1,686,288	0	964,069	794,617	724,364	11,378,402
2021	11,378,402	1,833,645	1,833,645	0	964,069	724,185	830,844	12,933,431
2022	12,933,431	1,936,743	1,936,743	0	964,069	664,358	939,852	14,537,641
2023	14,537,641	2,007,913	2,007,913	0	964,069	608,014	1,052,307	16,197,962
2024	16,197,962	2,139,602	2,139,602	0	964,069	560,088	1,168,695	17,926,745
2025	17,926,745	2,296,195	2,296,195	0	964,069	515,245	1,289,883	19,731,873
2026	19,731,873	2,396,492	2,396,492	0	964,069	470,620	1,416,423	21,618,916
2027	21,618,916	2,575,562	2,575,562	0	964,069	429,709	1,548,704	23,597,329
2028	23,597,329	2,732,956	2,732,956	0	964,069	390,298	1,687,391	25,675,018
2029	25,675,018	2,827,545	2,846,717	0	964,069	355,360	1,833,037	27,844,243
2030	27,844,243	2,902,357	2,952,520	0	964,069	323,414	1,985,100	30,102,594
2031	30,102,594	3,042,681	3,138,728	0	2,523,525	772,063	2,197,143	32,975,753
2032	32,975,753	3,107,410	3,265,710	0	2,523,525	708,287	2,398,552	35,924,292
2033	35,924,292	3,177,749	3,411,672	0	2,523,525	646,233	2,605,244	38,941,846
2034	38,941,846	3,300,725	3,595,132	0	2,523,525	585,604	2,816,775	42,049,818
2035	42,049,818	3,387,157	3,751,214	0	2,523,525	531,998	3,034,644	45,252,403
2036	45,252,403	3,485,372	3,928,351	0	2,523,525	482,876	3,259,145	48,551,445
2037	48,551,445	3,609,549	4,117,051	0	2,523,525	437,055	3,490,408	51,971,406
2038	51,971,406	3,702,302	4,282,014	0	2,523,525	395,860	3,730,147	55,517,701
2039	55,517,701	3,788,229	4,470,756	0	0	0	3,891,791	58,726,965
2040	58,726,965	3,951,389	4,769,938	0	0	0	4,116,760	62,025,176
2041	62,025,176	4,043,228	5,032,816	0	0	0	4,347,965	65,383,553
2042	65,383,553	4,107,454	5,307,902	0	0	0	4,583,387	68,766,492
2043	68,766,492	4,195,529	5,640,025	0	0	0	4,820,531	72,142,527
2044	72,142,527	4,177,499	5,830,685	0	0	0	5,057,191	75,546,532
2045	75,546,532	4,158,611	6,045,105	0	0	0	5,295,812	78,955,850
2046	78,955,850	4,187,503	6,331,887	0	0	0	5,534,805	82,346,271
2047	82,346,271	4,198,970	6,578,035	0	0	0	5,772,474	85,739,680
2048	85,739,680	4,131,067	6,766,320	0	0	0	6,010,352	89,114,779
2049	89,114,779	4,086,304	7,022,713	0	0	0	6,246,946	92,425,316

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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	6,888,077	1,382,116	1,382,116	0	1,382,116	0	1,382,116
2019	8,368,219	1,506,462	1,506,462	0	1,407,777	0	1,407,777
2020	9,859,421	1,686,288	1,686,288	0	1,472,594	0	1,472,594
2021	11,378,402	1,833,645	1,833,645	0	1,496,381	0	1,496,381
2022	12,933,431	1,936,743	1,936,743	0	1,476,980	0	1,476,980
2023	14,537,641	2,007,913	2,007,913	0	1,430,945	0	1,430,945
2024	16,197,962	2,139,602	2,139,602	0	1,424,908	0	1,424,908
2025	17,926,745	2,296,195	2,296,195	0	1,429,020	0	1,429,020
2026	19,731,873	2,396,492	2,396,492	0	1,393,738	0	1,393,738
2027	21,618,916	2,575,562	2,575,562	0	1,399,757	0	1,399,757
2028	23,597,329	2,732,956	2,732,956	0	1,387,999	0	1,387,999
2029	25,675,018	2,827,545	2,827,545	0	1,341,966	0	1,341,966
2030	27,844,243	2,902,357	2,902,357	0	1,287,237	0	1,287,237
2031	30,102,594	3,042,681	3,042,681	0	1,261,071	0	1,261,071
2032	32,975,753	3,107,410	3,107,410	0	1,203,532	0	1,203,532
2033	35,924,292	3,177,749	3,177,749	0	1,150,149	0	1,150,149
2034	38,941,846	3,300,725	3,300,725	0	1,116,399	0	1,116,399
2035	42,049,818	3,387,157	3,387,157	0	1,070,585	0	1,070,585
2036	45,252,403	3,485,372	3,485,372	0	1,029,463	0	1,029,463
2037	48,551,445	3,609,549	3,609,549	0	996,300	0	996,300
2038	51,971,406	3,702,302	3,702,302	0	954,959	0	954,959
2039	55,517,701	3,788,229	3,788,229	0	913,113	0	913,113
2040	58,726,965	3,951,389	3,951,389	0	890,049	0	890,049
2041	62,025,176	4,043,228	4,043,228	0	851,075	0	851,075
2042	65,383,553	4,107,454	4,107,454	0	807,956	0	807,956
2043	68,766,492	4,195,529	4,195,529	0	771,219	0	771,219
2044	72,142,527	4,177,499	4,177,499	0	717,601	0	717,601
2045	75,546,532	4,158,611	4,158,611	0	667,560	0	667,560
2046	78,955,850	4,187,503	4,187,503	0	628,164	0	628,164
2047	82,346,271	4,198,970	4,198,970	0	588,622	0	588,622
2048	85,739,680	4,131,067	4,131,067	0	541,167	0	541,167
2049	89,114,779	4,086,304	4,086,304	0	500,237	0	500,237

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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 experience		<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
	Recognition Period (years)							
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	0	6.91	<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 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	6.91	<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		2018	2019	2020	2021	2022	2023
	experience	Recognition Period (years)						
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	(100,301)	5.00	(20,060)	(20,060)	(20,060)	(20,060)	(20,061)	0
Net increase (decrease) in OPEB expense			(20,060)	(20,060)	(20,060)	(20,060)	(20,061)	0

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, 2019 (formerly December 31, 2017, but amended by Consolidated Appropriations Act) 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 2020 threshold amounts are \$11,850 for single coverage and \$30,950 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 \$238,897 and the increase in OPEB Expense is \$25,852. Given your premiums through the 2018 fiscal year and the excise tax threshold, your average single premiums are \$5,461 below the excise tax threshold and your average family premiums are \$7,097 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:	7.01%, net of OPEB plan investment expense, including inflation.
Single Equivalent Discount Rate:	7.00%, 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 BRequired 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:	352
Active Employees:	<u>638</u>
Total:	990

Changes in Assumptions: Effective June 30, 2017

- None

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	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 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	0	(100,301)	(20,060)	0	(80,241)
Total				0	(80,241)

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	0	0
II. Changes of assumptions	0	0
III. Net difference between projected & actual earnings on OPEB plan investments	<u>0</u>	<u>(80,241)</u>
IV. Total [I.+II.+III.]	0	(80,241)
Year ended June 30:		
	2019	(20,060)
	2020	(20,060)
	2021	(20,060)
	2022	(20,061)
	2023	0
	Thereafter	(0)

EXHIBIT B

Required 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 expects to contribute \$964,069 beyond the pay-as-you-go cost for the 2018 fiscal year. Total Town premiums plus implicit costs for the retiree medical program are \$1,382,116 for the 2018 fiscal year.

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	36.80	37.78
B. Average Service	<u>10.75</u>	<u>10.16</u>
C. Average Current Age	47.55	47.94

RETIRED EMPLOYEES & DEPENDENTS

	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Retirees		
A. Under Age 65	46	36
B. Age 65 & Over	<u>287</u>	<u>277</u>
C. Total Retirees	333	313
II. Dependents of Retirees		
A. Under Age 65	12	9
B. Age 65 & Over	<u>7</u>	<u>10</u>
C. Total Retirees	19	19
III. Retirees & Dependents		
A. Under Age 65	58	45
B. Age 65 & Over	<u>294</u>	<u>287</u>
C. Total Retirees	352	332

EXHIBIT D

Projected Cash Flows (Open Group) – Full Funding Approach

Total Medical, Dental & Life Insurance - Full Funding - 7.00% discount rate

Measurement Date	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 7.01% 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.]
	Measurement Date	Measurement Date	[I. - II.]	[II. / I.]				[VI. + VII.]
June 30, 2017	33,483,529	6,888,077	26,595,452	20.57%	925,445	1,382,116	964,069	2,346,185
June 30, 2018	35,387,932	8,368,219	27,019,713	23.65%	997,014	1,506,462	964,069	2,470,531
June 30, 2019	37,112,310	9,952,118	27,160,192	26.82%	1,056,320	1,686,288	964,069	2,650,357
June 30, 2020	38,993,643	11,647,049	27,346,594	29.87%	1,114,847	1,833,645	964,069	2,797,714
June 30, 2021	40,927,113	13,460,794	27,466,319	32.89%	1,179,972	1,936,743	964,069	2,900,812
June 30, 2022	42,958,501	15,401,683	27,556,818	35.85%	1,242,832	2,007,913	964,069	2,971,982
June 30, 2023	45,115,479	17,478,628	27,636,851	38.74%	1,310,098	2,139,602	964,069	3,103,671
June 30, 2024	47,363,429	19,701,167	27,662,262	41.60%	1,375,161	2,296,195	964,069	3,260,264
June 30, 2025	49,669,012	22,079,506	27,589,506	44.45%	1,440,105	2,396,492	964,069	3,360,561
June 30, 2026	52,093,768	24,624,567	27,469,201	47.27%	1,510,190	2,575,562	964,069	3,539,631
June 30, 2027	54,555,442	27,348,036	27,207,406	50.13%	1,580,446	2,732,956	964,069	3,697,025
June 30, 2028	57,051,048	30,262,421	26,788,627	53.04%	1,652,586	2,846,717	964,069	3,810,786
June 30, 2029	59,698,269	33,381,104	26,317,165	55.92%	1,731,001	2,952,520	964,069	3,916,589
June 30, 2030	62,349,036	36,718,407	25,630,629	58.89%	1,812,913	3,138,728	2,523,525	5,662,253
June 30, 2031	65,270,351	41,902,844	23,367,507	64.20%	1,901,548	3,265,710	2,523,525	5,789,235
June 30, 2032	68,267,375	47,450,710	20,816,665	69.51%	1,991,169	3,411,672	2,523,525	5,935,197
June 30, 2033	71,182,547	53,387,481	17,795,066	75.00%	2,082,288	3,595,132	2,523,525	6,118,657
June 30, 2034	74,377,712	59,740,420	14,637,292	80.32%	2,186,294	3,751,214	2,523,525	6,274,739
June 30, 2035	77,775,112	66,538,700	11,236,412	85.55%	2,293,002	3,928,351	2,523,525	6,451,876
June 30, 2036	81,267,417	73,813,539	7,453,878	90.83%	2,404,949	4,117,051	2,523,525	6,640,576
June 30, 2037	84,941,598	81,598,345	3,343,253	96.06%	2,522,936	4,282,014	2,523,525	6,805,539
June 30, 2038	88,906,587	89,928,865	(1,022,278)	101.15%	2,646,900	4,470,756	(1,022,278)	3,448,478
June 30, 2039	93,040,826	95,175,376	(2,134,550)	102.29%	2,779,779	4,769,938	(2,134,550)	2,635,388
June 30, 2040	97,282,120	99,639,071	(2,356,951)	102.42%	2,921,541	5,032,816	(2,356,951)	2,675,865
June 30, 2041	101,826,834	104,185,607	(2,358,773)	102.32%	3,076,729	5,307,902	(2,358,773)	2,949,129
June 30, 2042	106,518,899	109,048,970	(2,530,071)	102.38%	3,240,159	5,640,025	(2,530,071)	3,109,954
June 30, 2043	111,411,576	114,076,055	(2,664,479)	102.39%	3,415,912	5,830,685	(2,664,479)	3,166,206
June 30, 2044	116,706,973	119,316,499	(2,609,526)	102.24%	3,604,368	6,045,105	(2,609,526)	3,435,579
June 30, 2045	122,341,459	124,981,145	(2,639,686)	102.16%	3,801,991	6,331,887	(2,639,686)	3,692,201
June 30, 2046	128,239,534	131,011,683	(2,772,149)	102.16%	4,010,952	6,578,035	(2,772,149)	3,805,886
June 30, 2047	134,492,013	137,327,935	(2,835,922)	102.11%	4,231,826	6,766,320	(2,835,922)	3,930,398
June 30, 2048	141,149,201	144,020,986	(2,871,785)	102.03%	4,461,348	7,022,713	(2,871,785)	4,150,928

EXHIBIT D

Projected Cash Flows (Open Group) – Full Funding Approach

Total Medical & Life Insurance - Full Funding

Measurement Date	Number of Retirees, Spouses & Surviving Spouses	Total OPEB Liability	Present Value at 2.75% of Total OPEB Liability	Employer Share of Premiums / Claims including "implicit cost"	Present Value at 2.75% of Employer Share of Premiums / Claims including "implicit cost"
June 30, 2017	352	33,483,529	33,483,529	1,382,116	1,382,116
June 30, 2018	400	35,387,932	34,440,810	1,506,462	1,466,143
June 30, 2019	427	37,112,310	35,152,347	1,686,288	1,597,232
June 30, 2020	450	38,993,643	35,945,814	1,833,645	1,690,323
June 30, 2021	471	40,927,113	36,718,403	1,936,743	1,737,579
June 30, 2022	486	42,958,501	37,509,387	2,007,913	1,753,217
June 30, 2023	499	45,115,479	38,338,453	2,139,602	1,818,202
June 30, 2024	509	47,363,429	39,171,511	2,296,195	1,899,048
June 30, 2025	519	49,669,012	39,978,903	2,396,492	1,928,952
June 30, 2026	527	52,093,768	40,808,375	2,575,562	2,017,602
June 30, 2027	534	54,555,442	41,592,955	2,732,956	2,083,600
June 30, 2028	541	57,051,048	42,331,484	2,846,717	2,112,244
June 30, 2029	546	59,698,269	43,110,174	2,952,520	2,132,116
June 30, 2030	551	62,349,036	43,819,351	3,138,728	2,205,921
June 30, 2031	553	65,270,351	44,644,742	3,265,710	2,233,737
June 30, 2032	554	68,267,375	45,444,962	3,411,672	2,271,119
June 30, 2033	554	71,182,547	46,117,338	3,595,132	2,329,193
June 30, 2034	553	74,377,712	46,897,716	3,751,214	2,365,270
June 30, 2035	553	77,775,112	47,727,391	3,928,351	2,410,668
June 30, 2036	554	81,267,417	48,535,742	4,117,051	2,458,847
June 30, 2037	553	84,941,598	49,372,352	4,282,014	2,488,923
June 30, 2038	552	88,906,587	50,293,921	4,470,756	2,529,080
June 30, 2039	551	93,040,826	51,223,976	4,769,938	2,626,107
June 30, 2040	552	97,282,120	52,125,583	5,032,816	2,696,677
June 30, 2041	553	101,826,834	53,100,463	5,307,902	2,767,955
June 30, 2042	553	106,518,899	54,060,605	5,640,025	2,862,433
June 30, 2043	554	111,411,576	55,030,407	5,830,685	2,879,997
June 30, 2044	555	116,706,973	56,103,167	6,045,105	2,905,992
June 30, 2045	556	122,341,459	57,237,730	6,331,887	2,962,388
June 30, 2046	556	128,239,534	58,391,394	6,578,035	2,995,181
June 30, 2047	556	134,492,013	59,599,357	6,766,320	2,998,456
June 30, 2048	556	141,149,201	60,875,379	7,022,713	3,028,783
June 30, 2049	556	148,231,890	62,219,006	7,331,916	3,077,506
June 30, 2050	556	155,806,586	63,648,094	7,609,152	3,108,392
June 30, 2051	557	163,945,039	65,180,253	7,912,047	3,145,623
June 30, 2052	557	172,606,733	66,787,266	8,306,817	3,214,183
June 30, 2053	558	181,790,318	68,458,101	8,687,470	3,271,504
June 30, 2054	559	191,549,475	70,202,606	9,099,665	3,335,014
June 30, 2055	559	201,911,235	72,019,636	9,554,345	3,407,935
June 30, 2056	560	212,875,617	73,898,314	10,016,674	3,477,220

EXHIBIT E**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.

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 present value of a series of future cash flows. Under GASB 45, the rate should be "long term expected yield on the investments that are expected to be used to pay benefits as they come due. These would be plan investments for a funded plan, the employer's investments for a pay as you go plan [e.g. short term county investment pool], or a weighted average of expected plan and employer investments for a plan that is partially funded".

FASB - Financial Accounting Standards Board. "Since 1973, the Financial Accounting Standards Board (FASB) has been the designated organization in the private sector for establishing standards of financial accounting and reporting".

EXHIBIT E**GLOSSARY***(continued)*

Fiduciary Net Position - The value of cash, investments, other assets and property belonging to an OPEB trust, pension fund or similar entity, as used by the actuary to perform an actuarial valuation.

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."

GFOA - Government Finance Officers Association. "GFOA is the professional association of state/provincial and local finance officers in the United States and Canada, and has served the public finance profession since 1906. Approximately 16,000 GFOA members are dedicated to the sound management of government financial resources."

Implicit Subsidy - "The difference between a premium rate charged to retirees for a particular benefit and the estimated rate that would have been applicable to those retirees if that benefit was acquired for them as a separate group."

Irrevocable Contribution - "Irrevocably transferred assets to a qualifying trust, or equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator. The preceding criteria preclude counting as [irrevocable] contributions (a) designations of net assets of a governmental or proprietary fund to be used for OPEB or (b) internal transfers of assets to a separate governmental or proprietary fund for the same purpose. Rather, such actions should be regarded as earmarking of employer assets."

Level Dollar Amortization - Funding a shortfall in OPEB assets with equal dollar payments over a designated number of years (no more than 30 years). The present value of the level payments equals the present value of unfunded liabilities, the NOL.

EXHIBIT E**GLOSSARY***(continued)*

Level Percent of Payroll Amortization - Funding a shortfall in OPEB assets as a level percent of payroll over a designated number of years (no more than 30 years). The present value of the payments equals the present value of unfunded liabilities, the NOL. Level percent of payroll typically has lower payments in the early years than level dollar amortization. When using level payroll amortization, employee count is assumed to be constant, and the payroll differences arise from overall wage trends.

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

OPEB - Other Post Employment Benefits

OPEB Trust - An entity other than a pension or retirement system which manages OPEB assets. In many respects it is similar to a pension fund for OPEB. For reasons detailed in GASB 45, contributions to an OPEB trust should be irrevocable in order to obtain the most favorable accounting treatment.

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.

Pension Obligation Bond (POB) - Generally yielding taxable interest, POBs are issued to help fund a previously unfunded or underfunded pension liability.

Service Cost (Formerly Normal 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 pension plan benefits and expenses which is not provided for by future Service Costs.