

**Town of Hamilton 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 11, 2018

*Personal and Confidential*

Ms. Dyan Katz  
Assistant Town Accountant  
Town of Hamilton  
577 Bay Road, PO Box 429  
Hamilton, MA 01936

Dear Ms. Katz:

We have performed an actuarial valuation of the Town of Hamilton 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 Hamilton, 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 11, 2018

ACTUARIAL CERTIFICATION

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



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Parker E. Elmore, ASA, EA, FCA, MAAA  
President, CEO & 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 15 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 \$125,908 or 2.98%. This was mainly due to an updated mortality table as recommended by PERAC. This was mostly offset by premiums increasing less than the expected 16% increase. The actuarial experience loss is amortized into the net OPEB expense over time until fully recognized. Changes in assumptions decreased disclosed liabilities by \$1.75 million.

Over the three year period, the Total OPEB Liability ("TOL") went from \$5,959,170 as of June 30, 2014 to \$4,567,505 as of June 30, 2017 for a decrease of \$1,391,665. The Net OPEB Expense was (\$52,710) 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

Some key assumptions have changed since the prior valuation - their impact is detailed below.

- ✓ Based on recommendations by PERAC, the mortality table was updated from the RP-2000 Mortality Table projected to 2017 to RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females increasing the disclosed liability by \$490 thousand.
- ✓ Due to the GASB 75 standards the discount rate was changed from 4.00% to 6.75% decreasing the disclosed liability by \$2.24 million.
- ✓ Assumption changes caused Normal Cost to decrease by \$82 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 70% 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 (6.75%) – 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.

<b>Impact of Implicit Subsidy</b>		
<b>Impact on Liability</b>	<b>As Of The Measurement Date</b>	
	<b><u>June 30, 2017</u></b>	<b><u>June 30, 2014</u></b>
I. Actuarial Accrued Liability	4,567,505	5,959,170
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>4,222,273</u>	<u>N/A</u>
III. Liability from Implicit Subsidy [I. - II.]	345,232	N/A

<b>Impact on Payments</b>	<b>For The Fiscal Year Ending</b>	
	<b><u>June 30, 2018</u></b>	<b><u>June 30, 2015</u></b>
IV. Employer Payments (Including Implicit Subsidy)	354,621	334,061
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, 2014</u>
Total OPEB Liability	4,567,505	5,959,170
Per Eligible Active Plan Participant	41,977	45,664
Per Retiree/Spouse Plan Participant	52,535	81,000
Total Annual Service Cost (annual benefit accrual)	99,986	184,224
Per Eligible Active Plan Participant	1,666	3,290
Expected Employer Share of Retiree Costs	354,621	334,061
Per Retiree/Spouse Plan Participant	9,093	7,954
Net OPEB Liability as a % of Payroll	89.60%	225.50%
Average Annual Medical Plan Premium (Single Coverage)	6,310	6,610
Average Annual Medical Plan Premium (Family Coverage)	24,393	23,180
<b><u>Projected 2020 Excise Tax Thresholds</u></b>		
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	39	4,567,505	354,621
June 30, 2022	46	4,932,365	200,443
June 30, 2027	54	5,237,805	253,791
June 30, 2032	59	5,429,029	288,742
June 30, 2037	58	5,669,868	280,788
June 30, 2042	59	5,950,415	319,921
June 30, 2047	59	6,283,641	321,105

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
<b>Net OPEB Liability</b>	\$4,296,524	\$4,141,520	\$4,141,520
<b>Required Trust Contribution</b>	\$75,000	\$141,452	\$105,908
<b>Discount Rate</b>	6.75%	7.00%	7.00%

## SECTION I

### PRINCIPAL RESULTS OF THE VALUATION

**Town of Hamilton**  
**Assuming Partial Funding - 6.75% discount rate**  
**Comparison of Plan Liabilities to Prior Valuation**

	As of the Measurement Date	
	<u>June 30, 2017</u>	<u>June 30, 2014</u>
I. Present Value of Future Benefits		
A. Actives	3,420,982	4,749,293
B. Retirees/Disabled	<u>2,048,875</u>	<u>3,401,999</u>
C. Total	5,469,857	8,151,292
II. Present Value of Future Normal Cost	902,352	2,192,122
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	2,518,630	2,557,171
B. Retirees/Disabled	<u>2,048,875</u>	<u>3,401,999</u>
C. Total	4,567,505	5,959,170
IV. Fiduciary Net Position [Plan Assets]	270,981	119,161
V. Net OPEB Liability (Asset) [III. - IV.]	4,296,524	5,840,009
VI. Funded Ratio [IV. / III.]	5.93%	2.00%
VII. Annual Covered Payroll	4,794,875	2,589,736
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	89.6%	225.5%
IX. Number of Eligible Participants		
A. Actives	60	56
B. Retirees/Disabled	<u>39</u>	<u>42</u>
C. Total	99	98
	<b><u>June 30, 2018</u></b>	<b><u>June 30, 2015</u></b>
X. Service Cost	99,986	184,224
XI. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	277,561	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. Adjustment for Variance in Discount Rate and Investment Rate	(636)	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.]	376,911	N/A
XVII. Employer Share of Costs	(354,621)	(334,061)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(75,000)	(25,000)
XIX. Total Employer Contribution [XVII. + XVIII.]	(429,621)	(359,061)
XX. Other Changes	<u>0</u>	<u>N/A</u>
XXI. Net OPEB Expense [XVII.+XIX.+XX.]	(52,710)	N/A
XXII. Discount Rate	6.75%	4.00%

SECTION I  
PRINCIPAL RESULTS OF THE VALUATION  
(continued)

**Town of Hamilton**  
**Assuming Partial Funding - 6.75% 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	3,313,688	0	52,204	55,090	3,420,982
B. Retirees/Disabled	<u>1,881,856</u>	<u>0</u>	<u>133,032</u>	<u>33,987</u>	<u>2,048,875</u>
C. Total	5,195,544	0	185,236	89,077	5,469,857
II. Present Value of Future Normal Cost	861,432	0	12,014	28,906	902,352
III. Total OPEB Liability					
A. Actives	2,452,256	0	40,190	26,184	2,518,630
B. Retirees/Disabled	<u>1,881,856</u>	<u>0</u>	<u>133,032</u>	<u>33,987</u>	<u>2,048,875</u>
C. Total	4,334,112	0	173,222	60,171	4,567,505
IV. Fiduciary Net Position [Plan Assets]	257,134	0	10,277	3,570	270,981
V. Net OPEB Liability (Asset) [III. - IV.]	4,076,978	0	162,945	56,601	4,296,524
VI. Annual Covered Payroll	4,794,875	4,794,875	4,794,875	4,794,875	4,794,875
VII. Net OPEB Liability (Asset) as % of Covered Payroll	85.0%	0.0%	3.4%	1.2%	89.6%
VIII. Number of Eligible Participants					
IX. A. Actives	60	60	60	60	
B. Retirees/Disabled	<u>39</u>	<u>0</u>	<u>27</u>	<u>39</u>	
C. Total	99	60	87	99	
<b>For the Reporting Date and Fiscal Year Ending June 30, 2018</b>					
X. Service Cost	96,557	0	1,524	1,905	99,986
XI. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	263,402	0	10,343	3,816	277,561
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. Adjustment for Variance in Discount Rate and Investment Rate	(641)	0	0	5	(636)
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.]	359,318	0	11,867	5,726	376,911
XVIII. Employer Share of Costs	(332,312)	0	(22,309)	0	(354,621)
XIX. Employer (Payments)/Withdrawals to/from OPEB Trust	(71,894)	0	(2,227)	(879)	(75,000)
XX. Total Employer Contribution [XVIII. + XIX.]	(404,206)	0	(24,536)	(879)	(429,621)
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.]	(44,888)	0	(12,669)	4,847	(52,710)

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

	Town Employees and Retirees	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	556,510	1,836,716	471,781	242,945	313,030	3,420,982
B. Retirees/Disabled	<u>286,646</u>	<u>847,084</u>	<u>461,663</u>	<u>204,962</u>	<u>248,520</u>	<u>2,048,875</u>
C. Total	843,156	2,683,800	933,444	447,907	561,550	5,469,857
II. Present Value of Future Normal Cost	160,704	490,317	121,550	110,013	19,768	902,352
III. Total OPEB Liability						
A. Actives	395,806	1,346,399	350,231	132,932	293,262	2,518,630
B. Retirees/Disabled	<u>286,646</u>	<u>847,084</u>	<u>461,663</u>	<u>204,962</u>	<u>248,520</u>	<u>2,048,875</u>
C. Total	682,452	2,193,483	811,894	337,894	541,782	4,567,505
IV. Fiduciary Net Position [Plan Assets]	38,205	130,912	49,021	19,499	33,344	270,981
V. Net OPEB Liability (Asset) [III. - IV.]	644,247	2,062,571	762,873	318,395	508,438	4,296,524
VI. Annual Covered Payroll	1,104,627	2,415,334	883,833	90,005	301,076	4,794,875
VII. Net OPEB Liability (Asset) as % of Covered Payroll	58.3%	85.4%	86.3%	353.8%	168.9%	89.6%
VIII. Number of Eligible Participants						
A. Actives	17	22	10	6	5	60
B. Retirees/Disabled	<u>9</u>	<u>14</u>	<u>10</u>	<u>4</u>	<u>2</u>	<u>39</u>
C. Total	26	36	20	10	7	99
<b>For the Reporting Date and Fiscal Year Ending June 30, 2018</b>						
IX. Service Cost	29,968	44,586	12,972	8,119	4,341	99,986
X. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	21,383	145,657	52,764	22,092	35,665	277,561
XI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0	0
XII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	0	0	0	0	0	0
XIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0	0
XIV. Adjustment for Variance in Discount Rate and Investment Rate	(91)	(307)	(114)	(46)	(78)	(636)
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>	<u>0</u>
XVI. Financial Statement Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.]	51,260	189,936	65,622	30,165	39,928	376,911
XVII. Employer Share of Costs	(62,537)	(132,767)	(94,203)	(46,342)	(18,772)	(354,621)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(11,401)	(36,264)	(12,988)	(5,396)	(8,951)	(75,000)
XIX. Total Employer Contribution [XVII. + XVIII.]	(73,938)	(169,031)	(107,191)	(51,738)	(27,723)	(429,621)
XX. Other Changes	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
XXI. Net OPEB Expense [XVI.+XIX.+XX.]	(22,678)	20,905	(41,569)	(21,573)	12,205	(52,710)

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Hamilton**

**Detail of Plan Liabilities by Group and Dependency Status**

**Assuming Partial Funding - 6.75% 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>
<b>Actives</b>			
Under Age 65			
A. Participants	993,156	530,328	18,029
B. Spouses	<u>758,656</u>	<u>419,484</u>	<u>13,598</u>
C. Total	1,751,812	949,812	31,627
Age 65 and Over			
A. Participants	372,980	886,488	39,566
B. Spouses	<u>1,296,190</u>	<u>682,330</u>	<u>28,793</u>
C. Total	1,669,170	1,568,818	68,359
Actives Total			
A. Participants	1,366,136	1,416,816	57,595
B. Spouses	<u>2,054,846</u>	<u>1,101,814</u>	<u>42,391</u>
C. Total	3,420,982	2,518,630	99,986
<b>Retirees/Disabled</b>			
Under Age 65			
A. Participants	306,804	306,804	0
B. Spouses	<u>100,175</u>	<u>100,175</u>	<u>0</u>
C. Total	406,979	406,979	0
Age 65 and Over			
A. Participants	1,500,591	1,500,591	0
B. Spouses	<u>141,305</u>	<u>141,305</u>	<u>0</u>
C. Total	1,641,896	1,641,896	0
Retirees/Disabled Total			
A. Participants	1,807,395	1,807,395	0
B. Spouses	<u>241,480</u>	<u>241,480</u>	<u>0</u>
C. Total	2,048,875	2,048,875	0
<b>Total Population</b>			
A. Participants	3,173,531	3,224,211	57,595
B. Spouses	<u>2,296,326</u>	<u>1,343,294</u>	<u>42,391</u>
C. Total	5,469,857	4,567,505	99,986

## 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, 2014
Total OPEB Liability	\$4,567,505	\$5,959,170
Fiduciary Net Position	\$270,981	\$119,161
Net OPEB Liability	\$4,296,524	\$5,840,009
Funded Ratio	5.93%	2.00%

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

	June 30, 2018	June 30, 2015
Service Cost	\$99,986	\$184,224
Interest Expense	\$277,561	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	\$(636)	N/A
Recognition of (Inflow)/Outflow from Earnings on Investments	\$0	N/A
Financial Statement Expense	376,911	N/A
Employer Share of Costs	\$(354,621)	\$(334,061)
Employer Payments (Withdrawals) to/from Trust	\$(75,000)	\$(25,000)
Total Employer Payments	\$(429,621)	\$(359,061)
Other Changes	\$0	N/A
Net OPEB Expense	\$(52,710)	N/A
Interest Rate	6.75%	4.00%

## 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>	Participants shall pay 45% of premiums for Medical Insurance & 25% of premiums for Life insurance in retirement. Participants shall pay 100% of premiums for Dental Insurance.
<u>Benefits Offered</u>	Comprehensive Medical & Dental Insurance offered through Blue Cross Blue Shield of Massachusetts and Group Term Life Insurance through American International Group.
<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 (5.37 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

6.75% per annum (previously 4.00%)

##### Long Term Rate of Return

7.05% (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:

<b>Non-Public Safety Employees</b>						
<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%

<b>Public Safety Employees</b>		
<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 70% 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 70% 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	13		33	46
Blue Care Elect Preferred PPO				0
Medex II	26			26
<b>Total</b>	39	0	33	72

	Per Contract Costs (monthly) - FY 2018		
	Single	Two-Person	Family
Network Blue HMO	774.28		2,032.78
Blue Care Elect Preferred PPO	997.98		2,621.09
Medex II	401.57	803.14	

Gross Expected FY 2018 Incurred Premiums	1,051,058
Adjustment to reflect children's claims	(191,751)
<b>Total Expected FY 2018 Incurred Premiums (adults only)</b>	<b>859,307</b>

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

	<b>Employer Primary</b>	<b>Medicare Primary</b>
Age 65	14,172	4,363
Average Age	9,756	4,819

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	8,293	3,470	0
25 to 29	1.312	0.591	8,293	3,736	8,293
30 to 34	1.312	0.712	8,293	4,501	21,087
35 to 39	1.312	0.850	8,293	5,373	51,744
40 to 44	1.312	1.000	8,293	6,321	62,400
45 to 49	1.456	1.193	9,203	7,541	57,773
50 to 54	1.599	1.441	10,107	9,109	141,625
55 to 59	1.740	1.753	10,999	11,081	143,479
60 to 64	1.968	2.102	12,440	13,287	63,894
65 to 69	2.168	2.316	13,704	14,639	28,343
70 & Over	2.396	2.557	15,145	16,163	0
Total					578,638

**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	8,293	6,321	14,614
45 to 49	1.456	1.193	9,203	7,541	16,744
50 to 54	1.599	1.441	10,107	9,109	0
55 to 59	1.740	1.753	10,999	11,081	21,998
60 to 64	1.968	2.102	12,440	13,287	88,774
65 to 69	2.168	2.316	13,704	14,639	0
70 to 74	2.396	2.557	15,145	16,163	0
75 to 79	2.593	2.769	16,390	17,503	0
80 to 84	2.724	2.910	17,218	18,394	0
85 to 89	2.864	3.059	18,103	19,336	18,103
90 & Over	3.010	3.215	19,026	20,322	0
Total					160,233

**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	4,219	4,507	33,733
70 to 74	2.396	2.557	4,662	4,975	19,276
75 to 79	2.593	2.769	5,046	5,388	48,190
80 to 84	2.724	2.910	5,300	5,662	4,819
85 to 89	2.864	3.059	5,573	5,952	14,457
90 & Over	3.010	3.215	5,857	6,256	0
Total					120,475
Grand Totals					859,346

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>
<b>Dental Standard</b>	46.76		97.80
<b>Dental High</b>	58.12		122.93

## 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: Various Medical Insurance offerings via the Blue Cross Blue Shield of Massachusetts.
- b. Administrator: Town of Hamilton
- 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: Employees will pay 45% of premiums in retirement

#### **2. A DESCRIPTION OF THE RETIREE DENTAL INSURANCE PROGRAM:**

- a. Plan Type: Comprehensive Dental Insurance
- b. Administrator: Town of Hamilton
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 100% of premiums in retirement

#### **3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:**

- a. Plan Type: Group Term Life Insurance - \$15,000
- b. Administrator: Town of Hamilton
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 25% 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	45%	45%
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 are \$354,621. The Town is also projected to make a contribution to an OPEB Trust of \$75,000 for a total contribution during the period of \$429,621.



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.

<b>Investment Target Allocation &amp; Expected Long-Term Real Rate of Return</b>			
<b>Asset Class</b>	<b>Target Allocation</b>	<b>Asset Class</b>	<b>Long-Term Expected Real Rate of Return</b>
Domestic Equity - Large Cap	23.25%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	11.75%	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	20.00%	Domestic Fixed Income	2.00%
International Fixed Income	5.00%	International Fixed Income	3.00%
Alternatives	20.00%	Alternatives	6.50%
Real Estate	0.00%	Real Estate	6.25%
Cash	0.00%	Cash	0.00%
<b>Total</b>	<b>100.00%</b>		
		I. Real Rate of Return	4.55%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	7.30%
		IV. Investment Expense	0.25%
		V. Net Investment Return [III.-IV.]	7.05%

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:

<b>Actuarially Determined Contribution - Deficiency / (Excess)</b>	
<b><u>For the Fiscal Year Ending June 30, 2018</u></b>	
I. Service Cost	99,986
II. 30 year flat dollar amortization of NOL at 6.75%	<u>316,241</u>
III. Actuarial Determined Contribution [I. + II.]	416,227
IV. Contributions in relation to the actuarially determined contribution	<u>(429,621)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>(13,394)</u>
Covered employee payroll	4,794,875
Contributions as a % of covered employee payroll	8.96%

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 5.93% funded. The Total OPEB Liability (TOL) for benefits was \$4,567,505, and the Fiduciary Net Position was \$270,981, resulting in a Net OPEB Liability (NOL) of \$4,296,524. The covered payroll (annual payroll of active employees covered by the plan) was \$ 4,794,875 and the ratio of the NOL to the covered payroll was 89.6%.

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.)	\$550,626	\$4,998,937	\$4,448,311	11.0%	\$5,086,883	87.5%
06/30/2018 (est.)	\$393,550	\$4,805,292	\$4,411,742	8.2%	\$4,938,721	89.3%
06/30/2017	\$270,981	\$4,567,505	\$4,296,524	5.9%	\$4,794,875	89.6%
06/30/2016	\$175,645	\$6,456,754	\$6,281,109	2.7%	N/A	N/A
06/30/2015	\$145,725	\$6,205,988	\$6,060,263	2.3%	N/A	N/A
06/30/2014	\$119,161	\$5,959,170	\$5,840,009	2.0%	\$2,589,736	225.5%

EXHIBIT A

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

9. **FIDUCIARY NET POSITION**

<b>Statement of Fiduciary Net Position</b>		
<b>June 30, 2017 and June 30, 2018</b>		
	<u>June 30, 2018 (Projected)</u>	<u>June 30, 2017</u>
<b>Assets</b>		
I. Cash and cash equivalents	0	0
<u>Receivables &amp; 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	98,387	67,745
VIII. Stocks	216,453	149,040
IX. Cash and cash equivalents	0	0
X. Real estate	0	0
XI. Alternative investments	<u>78,710</u>	<u>54,196</u>
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	<u>393,550</u>	<u>270,981</u>
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
<b>Total Assets</b>	393,550	270,981
<b>Liabilities</b>		
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>
<b>XVI. Total liabilities [XIII.+XIV.+XV.]</b>	<u>0</u>	<u>0</u>
<b>XVII. Net Position restricted for OPEB [XII.-XVI.]</b>	393,550	270,981

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>
<b>Additions</b>	
<u>Contributions</u>	
Employer Contributions to OPEB Trust	75,000
Total Contributions	75,000
<u>Investment Income / (loss)</u>	
Interest	3,353
Dividends	2,981
Equity fund income, net	0
Net increase in fair value of investments	41,235
Securities lending income	0
Less investment expenses:	
Direct investment expense	0
Securities lending management fees	0
Securities lending borrower rebates	0
Net investment income	47,569
Other income	0
<b>Total Additions</b>	<u>122,569</u>
<b>Deductions</b>	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
<b>Total deductions</b>	<u>0</u>
<b>Net increase (decrease)</b>	122,569
<b>Net Position restricted for OPEB</b>	
Beginning of year	<u>270,981</u>
End of year	393,550

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	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	
I. Total OPEB Liability	682,452	2,193,483	811,894	337,894	541,782	4,567,505
II. Fiduciary Net Position as of June 30, 2017	38,205	130,912	49,021	19,499	33,344	270,981
III. Net OPEB Liability (Asset) [I.-II.]	644,247	2,062,571	762,873	318,395	508,438	4,296,524
IV. Service Cost	29,968	44,586	12,972	8,119	4,341	99,986
V. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	21,383	145,657	52,764	22,092	35,665	277,561
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. Adjustment for Variance in Discount Rate and Investment Rate	(91.00)	(307)	(114)	(46)	(78)	(636)
X. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	-	-	-	-	-	-
XI. Financial Statement Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.]	51,260	189,936	65,622	30,165	39,928	376,911
XII. Employer Share of Costs	(62,537)	(132,767)	(94,203)	(46,342)	(18,772)	(354,621)
XIII. Employer Payments (Withdrawals) to/from OPEB Trust	(11,401)	(36,264)	(12,988)	(5,396)	(8,951)	(75,000)
XIV. Total Employer Contribution [X.+XI.]	(73,938)	(169,031)	(107,191)	(51,738)	(27,723)	(429,621)
XV. Net OPEB Expense [XI.-XIV.]	(22,678)	20,905	(41,569)	(21,573)	12,205	(52,710)
XVI. Actuarial Determined Contribution (ADC)	71,003	200,465	70,305	32,294	42,160	416,227
XVII. Total Expected Contribution	73,938	169,031	107,191	51,738	27,723	429,621
XVIII. Percentage of ADC Contributed [XVII./XVI.]	104%	84%	152%	160%	66%	103%

	Fiscal Year Ending June 30, 2019					Total
	Town Employees and Retirees	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	
I. Total OPEB Liability	730,447	2,323,474	832,136	345,724	573,511	4,805,292
II. Fiduciary Net Position as of June 30, 2018	78,560	177,662	65,915	26,457	44,956	393,550
III. Net OPEB Liability (Asset) [I.-II.]	651,887	2,145,812	766,221	319,267	528,555	4,411,742
IV. Service Cost	32,701	48,652	14,155	8,859	4,737	109,104
V. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	22,192	151,160	54,757	22,927	37,012	288,048
VI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	-	-	-	-	-	-
VII. Recognition of Deferred (Inflows)/Outflows from Plan Experience	3,716	11,819	4,233	1,759	2,917	24,444
VIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	-	-	-	-	-	-
IX. Projected Earnings on OPEB plan investments	(137)	(463)	(172)	(69)	(117)	(958)
X. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	(163)	(518)	(185)	(77)	(128)	(1,071)
XI. Financial Statement Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.]	58,309	210,650	72,788	33,399	44,422	419,567
XII. Employer Share of Costs	(31,915)	(67,756)	(48,075)	(23,650)	(9,580)	(180,976)
XIII. Employer Payments (Withdrawals) to/from OPEB Trust	(15,201)	(48,352)	(17,317)	(7,195)	(11,935)	(100,000)
XIV. Total Employer Contribution [X.+XI.]	(47,116)	(116,108)	(65,392)	(30,845)	(21,515)	(280,976)
XV. Net OPEB Expense [XI.-XIV.]	11,193	94,542	7,396	2,554	22,907	138,591
XVI. Actuarial Determined Contribution (ADC)	80,682	206,592	70,552	32,358	43,641	433,825
XVII. Total Expected Contribution	47,116	116,108	65,392	30,845	21,515	280,976
XVIII. Percentage of ADC Contributed [XVII./XVI.]	58%	56%	93%	95%	49%	65%

EXHIBIT A

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

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

	For the Reporting Date	
	June 30, 2018	June 30, 2019
<b>Source of Deferred Inflow/Outflow</b>		
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	131,262	106,818
II. Deferred (Inflow)/Outflow from Investment Experience	(5,354)	(4,283)
III. Deferred (Inflow)/Outflow from Changes in Benefit Terms	0	0
IV. Deferred (Inflow)/Outflow from Changes in Assumptions	0	0

	For the period ending on the Measurement Date	
	June 30, 2017	June 30, 2018
<b>Change in Deferred Inflow/Outflow</b>		
I. Deferred Outflow at the beginning of the period	0	131,262
II. Deferred Outflow created during the period	131,262	0
III. Deferred Outflow recognized during the period	0	24,444
IV. Change in Deferred Outflow (II. + III.)	131,262	24,444
V. Deferred Outflow at end of the period (I. - IV.)	131,262	106,818
VI. Deferred Inflow at the beginning of the period	0	(5,354)
VII. Deferred Inflow created during the period	(5,354)	0
VIII. Deferred Inflow recognized during the period	0	(1,071)
IX. Change in Deferred Inflow (VII. + VIII.)	(5,354)	(1,071)
X. Deferred Inflow at end of the period (VI. - IX.)	(5,354)	(4,283)

	For the Reporting Date	
	June 30, 2018	June 30, 2019
<b>Net OPEB Liability</b>		
I. Net OPEB Liability at beginning of period	4,223,326	4,296,524
II. Net OPEB Expense - Excluding Payments	376,911	397,152
III. Total Employer Contributions	(429,621)	(280,976)
IV. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III.)	(52,710)	116,176
V. Deferred Outflow created during the period	131,262	0
VI. Deferred Inflow created during the period	(5,354)	0
VII. Net OPEB Liability at end of period (I. + IV. + V + VI)	4,296,524	4,412,700

	For the period ending on the Measurement Date	
	June 30, 2017	June 30, 2018
<b>Net OPEB Expense</b>		
I. Service Cost	99,986	109,104
II. Interest on Net OPEB Liability, Service Cost, and Payments	277,561	288,048
III. Adjustment for Variance in Discount Rate and Investment Rate	(636)	0
IV. Recognition of Deferred (Inflow)/Outflow	0	23,373
V. Financial Statement Expense [I. + II. + III. + IV.]	376,911	420,525
VI. Benefit Payments	(354,621)	(180,976)
VII. Contributions to Trust	(75,000)	(100,000)
VIII. Total Employer Payments [VI. + VII.]	(429,621)	(280,976)
IX. Total Net OPEB Expense under GASB 75 (V. + VIII.)	(52,710)	139,549

Measurement Date June 30, 2017 June 30, 2018

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 Net OPEB Liability would increase to \$5,592,029 or by 30.2% and the corresponding Service Cost would increase to \$146,106 or by 46.1%. 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 \$3,259,093 or by 24.1% and the corresponding Service Cost would decrease to \$64,933 or by 35.1%.

**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>
Net OPEB Liability	3,259,093	4,296,524	5,592,029
Service Cost	64,933	99,986	146,106

**13. 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 \$3,670,839 or by 14.6% and the corresponding Service Cost would decrease to \$75,176 or by 24.8%. If the discount rate were 1% lower than was used in this valuation, the Net OPEB Liability would increase to \$4,961,922 or by 15.5% and the corresponding Service Cost would increase to \$127,046 or by 27.1%.

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

	<u>1% Decrease (5.75%)</u>	<u>Current Discount Rate (6.75%)</u>	<u>1% Increase (7.75%)</u>
Net OPEB Liability	4,961,922	4,296,524	3,670,839
Service Cost	127,046	99,986	75,176



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: 6.75% 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 Hamilton has established an irrevocable trust for the purposes of prefunding liabilities under GASB 74/75.

**16. OPEB EXPENSE DEVELOPMENT**

<b>Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2018</b>	
<b>Description</b>	<b>Amount</b>
I. Service Cost	99,986
II. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	277,561
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	(636)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	0
VIII. Total Employer Contributions	(429,621)
IX. OPEB Plan administrative expense	0
X. Other changes in fiduciary net position	0
<b>XI. Net OPEB expense [I.+II.+III.+IV.+V.+VI.+VII.+VIII.+IX.+ X.]</b>	<b>(52,710)</b>

\* Recognized Immediately

\*\* Amortized over 5.37 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
<b>I. Balances at June 30, 2016 GASB 45</b>	6,456,754	175,645	6,281,109
<b>II. Change in Assumptions for GASB 75</b>	<u>(2,057,783)</u>	<u>0</u>	<u>(2,057,783)</u>
<b>III. Balances at June 30, 2016 GASB 75 [I. + II.]</b>	<b>4,398,971</b>	175,645	4,223,326
<b>Changes for the year:</b>			
IV. Service Cost	99,986	0	99,986
V. Interest on Net OPEB Liability, Service Cost, and Benefit Payments	291,907	14,346	277,561
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	131,262	5,354	125,908
IX. Adjustment for variance in discount rate and investment rate	0	636	(636)
X. Employer Contributions to Trust	0	429,621	(429,621)
XI. Benefit Payments Withdrawn from Trust	0	(354,621)	354,621
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>(354,621)</u>	<u>0</u>	<u>(354,621)</u>
XV. Administrative expense	0	0	0
XVI. Other Charges	0	0	0
<b>XVII. Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]</b>	<u>168,534</u>	<u>95,336</u>	<u>73,198</u>
<b>XVII. Balances at June 30, 2017 [III.+XVII.]</b>	4,567,505	270,981	4,296,524

\* Recognized Immediately

\*\* Amortized over 5.37 years

EXHIBIT A

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

**18. MONEY WEIGHTED RATE OF RETURN**

<b>Determination of Beginning &amp; Ending Balances of OPEB Plan Investments for Purposes of Calculating the Annual Money-Weighted Rate of Return</b>		
	<b>Ending OPEB Plan Investments *</b>	<b>Beginning OPEB Plan Investments **</b>
<b>Assets</b>		
Cash and cash equivalents	0	0
Receivables:		
Investment income	0	0
Receivables from brokers for unsettled trades	0	0
Investments		
Fixed income	98,387	67,745
Stocks	216,453	149,040
Cash and cash equivalents	0	0
Real estate	0	0
Alternative investments	78,710	54,196
Invested securities lending cash collateral	0	0
<b>Liabilities</b>		
Securities lending cash collateral	0	0
Payable to brokers for unsettled trades	0	0
<b>Total OPEB plan investments</b>	<b>393,550</b>	<b>270,981</b>
* 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	175,645	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	75,000	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	75,000		
III. Earnings and increase in fair value	20,336		
IV. Ending value - June 30, 2017 [I.+II.+III.]	270,981		
Money Weighted Rate of Return	9.58%		
Asset Value - June 30, 2017	270,981		

EXHIBIT A

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

19. PLAN CASH FLOWS

<b>Aggregate External (Noninvestment Cash Flows)</b>	
<b><u>June 30, 2018</u></b>	
<b>Additions</b>	
<u>Contributions</u>	
Member contributions	0
Employer contributions	75,000
Other income	0
<b>Deductions</b>	
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	75,000
* 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)**

<b>Reconciliation of Beginning &amp; Ending Balances of OPEB Plan Investments, Aggregate External Cash Flows, and Net Investment Income</b>	
	<u><b>June 30, 2018 (Projected)</b></u>
I. Total OPEB plan investments, beginning of year	270,981
II. Aggregate external cash flows	75,000
III. Net investment income	<u>47,569</u>
IV. Total OPEB plan investments, end of year [I.+II.+III.]	<u><u>393,550</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	4,794,875	0	4,794,875	0	354,621	0	354,621
2019	4,511,018	427,703	4,938,721	0	180,975	1	180,976
2020	4,281,458	805,425	5,086,883	0	203,631	0	203,631
2021	4,049,109	1,190,380	5,239,489	0	211,302	0	211,302
2022	3,894,462	1,502,212	5,396,674	0	209,787	0	209,787
2023	3,730,681	1,827,893	5,558,574	0	232,368	0	232,368
2024	3,507,386	2,217,945	5,725,331	0	245,648	0	245,648
2025	3,336,786	2,560,305	5,897,091	0	269,347	0	269,347
2026	3,112,898	2,961,106	6,074,004	0	284,467	0	284,467
2027	2,801,426	3,454,798	6,256,224	0	315,862	0	315,862
2028	2,549,500	3,894,411	6,443,911	0	341,074	0	341,074
2029	2,315,640	4,321,588	6,637,228	0	378,100	0	378,100
2030	2,138,693	4,697,652	6,836,345	0	396,059	1,785	397,844
2031	1,949,556	5,091,879	7,041,435	0	412,547	4,636	417,183
2032	1,777,932	5,474,746	7,252,678	0	426,738	8,787	435,525
2033	1,654,419	5,815,839	7,470,258	0	435,375	14,475	449,850
2034	1,502,698	6,191,668	7,694,366	0	450,433	21,446	471,879
2035	1,396,422	6,528,775	7,925,197	0	425,097	27,524	452,621
2036	1,277,842	6,885,111	8,162,953	0	423,545	34,875	458,420
2037	1,202,937	7,204,905	8,407,842	0	441,619	43,157	484,776
2038	1,127,681	7,532,396	8,660,077	0	455,782	51,352	507,134
2039	1,042,869	7,877,010	8,919,879	0	466,806	60,817	527,623
2040	947,191	8,240,284	9,187,475	0	487,604	73,203	560,807
2041	858,437	8,604,662	9,463,099	0	500,948	88,521	589,469
2042	770,179	8,976,813	9,746,992	0	520,736	107,526	628,262
2043	689,454	9,349,948	10,039,402	0	540,132	129,712	669,844
2044	603,789	9,736,795	10,340,584	0	539,800	154,712	694,512
2045	525,478	10,125,324	10,650,802	0	542,293	177,188	719,481
2046	464,298	10,506,028	10,970,326	0	533,589	201,820	735,409
2047	414,302	10,885,134	11,299,436	0	536,869	229,041	765,910
2048	343,492	11,294,927	11,638,419	0	523,943	255,463	779,406
2049	278,062	11,709,510	11,987,572	0	533,833	285,092	818,925
2050	248,301	12,098,898	12,347,199	0	542,332	319,088	861,420
2051	208,081	12,509,534	12,717,615	0	545,345	355,218	900,563
2052	174,525	12,924,618	13,099,143	0	529,279	395,819	925,098
2053	144,513	13,347,604	13,492,117	0	535,368	438,963	974,331
2054	119,205	13,777,676	13,896,881	0	539,677	484,542	1,024,219
2055	95,865	14,217,922	14,313,787	0	519,609	531,306	1,050,915
2056	70,517	14,672,684	14,743,201	0	519,424	580,267	1,099,691
2057	55,417	15,130,080	15,185,497	0	499,729	632,143	1,131,872



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	45,088	15,595,974	15,641,062	0	484,670	686,333	1,171,003
2059	35,368	16,074,926	16,110,294	0	475,099	744,115	1,219,214
2060	22,097	16,571,506	16,593,603	0	451,334	806,252	1,257,586
2061	12,515	17,078,896	17,091,411	0	433,263	870,966	1,304,229
2062	7,907	17,596,246	17,604,153	0	419,914	940,867	1,360,781
2063	4,738	18,127,540	18,132,278	0	407,608	1,015,125	1,422,733
2064	2,901	18,673,345	18,676,246	0	392,141	1,093,152	1,485,293
2065	2,227	19,234,306	19,236,533	0	378,328	1,175,018	1,553,346
2066	1,707	19,811,922	19,813,629	0	364,370	1,261,080	1,625,450
2067	1,219	20,406,819	20,408,038	0	348,131	1,351,375	1,699,506
2068	0	21,020,279	21,020,279	0	334,166	1,445,601	1,779,767
2069	0	21,650,887	21,650,887	0	322,618	1,544,582	1,867,200
2070	0	22,300,414	22,300,414	0	311,789	1,648,277	1,960,066
2071	0	22,969,426	22,969,426	0	300,881	1,756,572	2,057,453
2072	0	23,658,509	23,658,509	0	289,518	1,870,910	2,160,428
2073	0	24,368,264	24,368,264	0	277,695	1,990,346	2,268,041
2074	0	25,099,312	25,099,312	0	265,308	2,115,029	2,380,337
2075	0	25,852,291	25,852,291	0	252,415	2,245,918	2,498,333
2076	0	26,627,860	26,627,860	0	238,991	2,382,502	2,621,493
2077	0	27,426,696	27,426,696	0	225,155	2,525,254	2,750,409
2078	0	28,249,497	28,249,497	0	211,174	2,674,107	2,885,281
2079	0	29,096,982	29,096,982	0	197,230	2,829,841	3,027,071
2080	0	29,969,891	29,969,891	0	183,407	2,992,754	3,176,161
2081	0	30,868,988	30,868,988	0	169,727	3,162,742	3,332,469
2082	0	31,795,058	31,795,058	0	156,315	3,341,190	3,497,505
2083	0	32,748,910	32,748,910	0	143,052	3,528,021	3,671,073
2084	0	33,731,377	33,731,377	0	130,147	3,723,896	3,854,043
2085	0	34,743,318	34,743,318	0	117,483	3,929,458	4,046,941
2086	0	35,785,618	35,785,618	0	105,447	4,144,799	4,250,246
2087	0	36,859,187	36,859,187	0	93,670	4,370,719	4,464,389
2088	0	37,964,963	37,964,963	0	82,491	4,607,699	4,690,190
2089	0	39,103,912	39,103,912	0	71,874	4,856,579	4,928,453
2090	0	40,277,029	40,277,029	0	61,960	5,117,647	5,179,607
2091	0	41,485,340	41,485,340	0	52,952	5,392,054	5,445,006
2092	0	42,729,900	42,729,900	0	44,757	5,680,457	5,725,214
2093	0	44,011,797	44,011,797	0	37,465	5,983,521	6,020,986
2094	0	45,332,151	45,332,151	0	31,005	6,302,125	6,333,130
2095	0	46,692,116	46,692,116	0	25,419	6,637,052	6,662,471
2096	0	48,092,879	48,092,879	0	20,582	6,989,138	7,009,720

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	270,981	354,621	354,621	0	75,000	75,000	47,569	393,550
2019	393,550	180,975	180,976	0	100,000	91,340	31,210	516,099
2020	516,099	203,631	203,631	0	125,000	105,208	40,716	662,023
2021	662,023	211,302	211,302	0	100,000	77,281	50,138	789,442
2022	789,442	209,787	209,787	0	100,000	72,164	59,121	920,727
2023	920,727	232,368	232,368	0	100,000	67,116	68,376	1,056,219
2024	1,056,219	245,648	245,648	0	100,000	61,261	77,928	1,195,408
2025	1,195,408	269,347	269,347	0	100,000	56,584	87,741	1,339,733
2026	1,339,733	284,467	284,467	0	100,000	51,250	97,916	1,488,899
2027	1,488,899	315,862	315,862	0	100,000	44,778	108,432	1,642,109
2028	1,642,109	341,074	341,074	0	100,000	39,564	119,234	1,800,907
2029	1,800,907	378,100	378,100	0	100,000	34,889	130,429	1,966,225
2030	1,966,225	396,059	397,844	0	100,000	31,284	142,084	2,137,808
2031	2,137,808	412,547	417,183	0	100,000	27,687	154,180	2,315,039
2032	2,315,039	426,738	435,525	0	100,000	24,514	166,675	2,497,441
2033	2,497,441	435,375	449,850	0	100,000	22,147	179,535	2,684,648
2034	2,684,648	450,433	471,879	0	100,000	19,530	192,733	2,875,465
2035	2,875,465	425,097	452,621	0	100,000	17,620	206,185	3,071,746
2036	3,071,746	423,545	458,420	0	100,000	15,654	220,023	3,272,548
2037	3,272,548	441,619	484,776	0	100,000	14,307	234,180	3,477,878
2038	3,477,878	455,782	507,134	0	100,000	13,022	248,655	3,688,203
2039	3,688,203	466,806	527,623	0	100,000	11,692	263,483	3,902,561
2040	3,902,561	487,604	560,807	0	100,000	10,310	278,596	4,118,264
2041	4,118,264	500,948	589,469	0	100,000	9,071	293,803	4,332,617
2042	4,332,617	520,736	628,262	0	100,000	7,902	308,914	4,541,907
2043	4,541,907	540,132	669,844	0	100,000	6,867	323,669	4,742,731
2044	4,742,731	539,800	694,512	0	100,000	5,839	337,828	4,931,686
2045	4,931,686	542,293	719,481	0	100,000	4,934	351,149	5,110,581
2046	5,110,581	533,589	735,409	0	100,000	4,232	363,761	5,276,754
2047	5,276,754	536,869	765,910	0	100,000	3,667	375,476	5,426,856
2048	5,426,856	523,943	779,406	0	100,000	2,951	386,058	5,560,402
2049	5,560,402	533,833	818,925	0	100,000	2,320	395,473	5,673,103
2050	5,673,103	542,332	861,420	0	100,000	2,011	403,419	5,759,445
2051	5,759,445	545,345	900,563	0	100,000	1,636	409,506	5,815,369
2052	5,815,369	529,279	925,098	0	100,000	1,332	413,448	5,834,330
2053	5,834,330	535,368	974,331	0	100,000	1,071	414,785	5,811,223
2054	5,811,223	539,677	1,024,219	0	100,000	858	413,156	5,740,695
2055	5,740,695	519,609	1,050,915	0	100,000	670	408,184	5,618,243
2056	5,618,243	519,424	1,099,691	0	100,000	478	399,551	5,438,005
2057	5,438,005	499,729	1,131,872	0	0	0	383,379	5,189,241

EXHIBIT A

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

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

Fiscal Year	I. Projected	II. Portion of	III. Total	IV. Projected	V. Total	VI. Contributions	VII. Projected	VIII. Projected
	Beginning Fiduciary Net Position	Employer Contributions for Current Plan Members	Projected Benefit Payments	Administrative Expense	Contributions to Trust	to Trust for Current Plan Members	Investment Earnings	Ending Fiduciary Net Position for Current Plan Members
2058	5,189,241	484,670	1,171,003	0	0	0	365,841	4,705,626
2059	4,705,626	475,099	1,219,214	0	0	0	331,747	4,231,255
2060	4,231,255	451,334	1,257,586	0	0	0	298,303	3,780,318
2061	3,780,318	433,263	1,304,229	0	0	0	266,512	3,347,250
2062	3,347,250	419,914	1,360,781	0	0	0	235,981	2,927,442
2063	2,927,442	407,608	1,422,733	0	0	0	206,385	2,519,888
2064	2,519,888	392,141	1,485,293	0	0	0	177,652	2,127,775
2065	2,127,775	378,328	1,553,346	0	0	0	150,008	1,749,464
2066	1,749,464	364,370	1,625,450	0	0	0	123,337	1,385,105
2067	1,385,105	348,131	1,699,506	0	0	0	97,650	1,036,980
2068	1,036,980	334,166	1,779,767	0	0	0	73,107	702,814
2069	702,814	322,618	1,867,200	0	0	0	49,548	380,196
2070	380,196	311,789	1,960,066	0	0	0	26,804	68,407
2071	68,407	300,881	2,057,453	0	0	0	4,823	4,823
2072	4,823	289,518	2,160,428	0	0	0	340	340
2073	340	277,695	2,268,041	0	0	0	24	24
2074	24	265,308	2,380,337	0	0	0	2	2
2075	2	252,415	2,498,333	0	0	0	0	0
2076	0	238,991	2,621,493	0	0	0	0	0
2077	0	225,155	2,750,409	0	0	0	0	0
2078	0	211,174	2,885,281	0	0	0	0	0
2079	0	197,230	3,027,071	0	0	0	0	0
2080	0	183,407	3,176,161	0	0	0	0	0
2081	0	169,727	3,332,469	0	0	0	0	0
2082	0	156,315	3,497,505	0	0	0	0	0
2083	0	143,052	3,671,073	0	0	0	0	0
2084	0	130,147	3,854,043	0	0	0	0	0
2085	0	117,483	4,046,941	0	0	0	0	0
2086	0	105,447	4,250,246	0	0	0	0	0
2087	0	93,670	4,464,389	0	0	0	0	0
2088	0	82,491	4,690,190	0	0	0	0	0
2089	0	71,874	4,928,453	0	0	0	0	0
2090	0	61,960	5,179,607	0	0	0	0	0
2091	0	52,952	5,445,006	0	0	0	0	0
2092	0	44,757	5,725,214	0	0	0	0	0
2093	0	37,465	6,020,986	0	0	0	0	0
2094	0	31,005	6,333,130	0	0	0	0	0
2095	0	25,419	6,662,471	0	0	0	0	0
2096	0	20,582	7,009,720	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	270,981	354,621	270,981	83,640	270,981	83,640	354,621
2019	393,550	180,975	180,975	0	169,057	0	169,652
2020	516,099	203,631	203,631	0	177,693	0	178,946
2021	662,023	211,302	211,302	0	172,244	0	174,069
2022	789,442	209,787	209,787	0	159,747	0	162,008
2023	920,727	232,368	232,368	0	165,289	0	168,219
2024	1,056,219	245,648	245,648	0	163,227	0	166,706
2025	1,195,408	269,347	269,347	0	167,188	0	171,352
2026	1,339,733	284,467	284,467	0	164,945	0	169,648
2027	1,488,899	315,862	315,862	0	171,087	0	176,585
2028	1,642,109	341,074	341,074	0	172,577	0	178,749
2029	1,800,907	378,100	378,100	0	178,712	0	185,756
2030	1,966,225	396,059	396,059	0	174,872	0	182,404
2031	2,137,808	412,547	412,547	0	170,156	0	178,110
2032	2,315,039	426,738	426,738	0	164,417	0	172,709
2033	2,497,441	435,375	435,375	0	156,698	0	165,180
2034	2,684,648	450,433	450,433	0	151,441	0	160,201
2035	2,875,465	425,097	425,097	0	133,510	0	141,730
2036	3,071,746	423,545	423,545	0	124,262	0	132,377
2037	3,272,548	441,619	441,619	0	121,032	0	129,390
2038	3,477,878	455,782	455,782	0	116,687	0	125,184
2039	3,688,203	466,806	466,806	0	111,639	0	120,190
2040	3,902,561	487,604	487,604	0	108,933	0	117,690
2041	4,118,264	500,948	500,948	0	104,544	0	113,345
2042	4,332,617	520,736	520,736	0	101,517	0	110,451
2043	4,541,907	540,132	540,132	0	98,363	0	107,397
2044	4,742,731	539,800	539,800	0	91,829	0	100,615
2045	4,931,686	542,293	542,293	0	86,177	0	94,755
2046	5,110,581	533,589	533,589	0	79,210	0	87,401
2047	5,276,754	536,869	536,869	0	74,448	0	82,436
2048	5,426,856	523,943	523,943	0	67,871	0	75,418
2049	5,560,402	533,833	533,833	0	64,598	0	72,033
2050	5,673,103	542,332	542,332	0	61,304	0	68,601
2051	5,759,445	545,345	545,345	0	57,585	0	64,666
2052	5,815,369	529,279	529,279	0	52,208	0	58,834
2053	5,834,330	535,368	535,368	0	49,331	0	55,788
2054	5,811,223	539,677	539,677	0	46,453	0	52,718
2055	5,740,695	519,609	519,609	0	41,780	0	47,582
2056	5,618,243	519,424	519,424	0	39,015	0	44,589
2057	5,438,005	499,729	499,729	0	35,063	0	40,214

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	5,189,241	484,670	484,670	0	31,767	0	36,562
2059	4,705,626	475,099	475,099	0	29,089	0	33,598
2060	4,231,255	451,334	451,334	0	25,814	0	29,920
2061	3,780,318	433,263	433,263	0	23,149	0	26,925
2062	3,347,250	419,914	419,914	0	20,958	0	24,463
2063	2,927,442	407,608	407,608	0	19,004	0	22,260
2064	2,519,888	392,141	392,141	0	17,079	0	20,075
2065	2,127,775	378,328	378,328	0	15,392	0	18,156
2066	1,749,464	364,370	364,370	0	13,848	0	16,392
2067	1,385,105	348,131	348,131	0	12,359	0	14,682
2068	1,036,980	334,166	334,166	0	11,082	0	13,211
2069	702,814	322,618	322,618	0	9,995	0	11,957
2070	380,196	311,789	311,789	0	9,023	0	10,832
2071	68,407	300,881	186,982	113,899	5,055	22,263	9,799
2072	4,823	289,518	118,445	171,073	2,991	32,423	8,839
2073	340	277,695	108,977	168,718	2,571	31,007	7,948
2074	24	265,308	103,473	161,835	2,280	28,840	7,118
2075	2	252,415	98,038	154,377	2,018	26,677	6,349
2076	0	238,991	92,504	146,487	1,779	24,545	5,635
2077	0	225,155	86,824	138,331	1,560	22,476	4,976
2078	0	211,174	81,119	130,055	1,361	20,490	4,375
2079	0	197,230	75,458	121,772	1,183	18,603	3,831
2080	0	183,407	69,899	113,508	1,024	16,815	3,339
2081	0	169,727	64,462	105,265	882	15,121	2,897
2082	0	156,315	59,150	97,165	756	13,534	2,501
2083	0	143,052	53,965	89,087	644	12,032	2,146
2084	0	130,147	48,954	81,193	546	10,634	1,830
2085	0	117,483	44,075	73,408	459	9,322	1,549
2086	0	105,447	39,471	65,976	384	8,124	1,303
2087	0	93,670	34,996	58,674	318	7,006	1,085
2088	0	82,491	30,767	51,724	261	5,989	896
2089	0	71,874	26,769	45,105	212	5,064	732
2090	0	61,960	23,052	38,908	171	4,236	591
2091	0	52,952	19,683	33,269	136	3,512	474
2092	0	44,757	16,628	28,129	108	2,879	375
2093	0	37,465	13,917	23,548	84	2,337	295
2094	0	31,005	11,518	19,487	65	1,876	228
2095	0	25,419	9,446	15,973	50	1,491	176
2096	0	20,582	7,653	12,929	38	1,170	133

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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 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	131,262	5.37	<u>0</u>	<u>24,444</u>	<u>24,444</u>	<u>24,444</u>	<u>24,444</u>	<u>24,444</u>
Net increase (decrease) in OPEB expense			0	24,444	24,444	24,444	24,444	24,444

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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	5.37	<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

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

**21. CHANGES TO NET OPEB EXPENSE (CONTINUED)**

<b>Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of differences between Projected &amp; Actual Earnings on OPEB Plan Investments</b>									
<b>Fiscal Year</b>	<b>Differences between actual &amp; expected</b>		<b>Recognition Period (years)</b>	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>
	<b>experience</b>	<b>Recognition Period (years)</b>							
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018	(5,354)	5.00	0	(1,071)	(1,071)	(1,071)	(1,071)	(1,071)	(1,070)
Net increase (decrease) in OPEB expense				0	(1,071)	(1,071)	(1,071)	(1,071)	(1,070)



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 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 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 \$60,171 and the increase in OPEB Expense is \$4,847. Given your premiums through the 2018 fiscal year and the excise tax threshold, your average single premiums are \$6,201 below the excise tax threshold and your average family premiums are \$8,283 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:	7.05%, 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:	6.75%, 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:	39
Active Employees:	<u>60</u>
Total:	99

##### Changes in Assumptions:                      Effective June 30, 2017

- Discount rate is 6.75% previously 4.00%
- The assumed pre-retirement mortality table is the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females- previously RP-2000 Mortality Table projected to 2017
- The assumed post-retirement mortality table is the RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females- previously RP-2000 Mortality Table projected to 2017

EXHIBIT B

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

Notes to Required Supplementary Information (Continued):

<b>Deferred Outflows of Resources and Deferred Inflows of Resources Arising between Expected &amp; Actual Experience</b>					
<b>Fiscal Year</b>	<b>Experience Losses</b>	<b>Experience Gains</b>	<b>Amounts recognized in OPEB Expense through June 30, 2018</b>	<b>Balances at June 30, 2018</b>	
				<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
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	131,262	0	0	131,262	0
<b>Total</b>				<b>131,262</b>	<b>0</b>

EXHIBIT B

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

Notes to Required Supplementary Information (Continued):

<b>Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Changes of Assumptions</b>					
<b>Fiscal Year</b>	<b>Increase in the Total OPEB Liability</b>	<b>Decrease in the Total OPEB Liability</b>	<b>Amounts recognized in OPEB Expense through June 30, 2018</b>	<b>Balances at June 30, 2018</b>	
				<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
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
<b>Total</b>				<b>0</b>	<b>0</b>

EXHIBIT B

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

Notes to Required Supplementary Information (Continued):

<b>Deferred Outflows of Resources and Deferred Inflows of Resources between Projected &amp; Actual Earnings on OPEB Plan Investments</b>					
<b>Fiscal Year</b>	<b>Increase in the Total OPEB Liability</b>	<b>Decrease in the Total OPEB Liability</b>	<b>Amounts recognized in OPEB Expense through June 30, 2018</b>	<b>Balances at June 30, 2018</b>	
				<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
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	(5,354)	0	0	(5,354)
<b>Total</b>				0	(5,354)

EXHIBIT B

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

Notes to Required Supplementary Information (Continued):

<b>OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB as of June 30, 2018</b>		
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
I. Differences between actual & expected experience	131,262	0
II. Changes of assumptions	0	0
III. Net difference between projected & actual earnings on OPEB plan investments	<u>0</u>	<u>(5,354)</u>
IV. Total [I.+II.+III.]	131,262	(5,354)
<b>Year ended June 30:</b>		
	2019	23,373
	2020	23,373
	2021	23,373
	2022	23,373
	2023	23,374
	Thereafter	9,042

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 expects to contribute \$75,000 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 are \$354,621 .



EXHIBIT C

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

**ACTIVE EMPLOYEES**

	<u>June 30, 2017</u>	<u>June 30, 2014</u>
<b>A. Average Age at Hire</b>	35.61	35.98
<b>B. Average Service</b>	<u>12.95</u>	<u>11.76</u>
<b>C. Average Current Age</b>	48.56	47.74

**RETIRED EMPLOYEES & DEPENDENTS**

	<u>June 30, 2017</u>	<u>June 30, 2014</u>
<b>I. Retirees</b>		
<b>A. Under Age 65</b>	9	10
<b>B. Age 65 &amp; Over</b>	<u>26</u>	<u>27</u>
<b>C. Total Retirees</b>	35	37
<b>II. Dependents of Retirees</b>		
<b>A. Under Age 65</b>	4	4
<b>B. Age 65 &amp; Over</b>	<u>0</u>	<u>1</u>
<b>C. Total Retirees</b>	4	5
<b>III. Retirees &amp; Dependents</b>		
<b>A. Under Age 65</b>	13	14
<b>B. Age 65 &amp; Over</b>	<u>26</u>	<u>28</u>
<b>C. Total Retirees</b>	39	42

EXHIBIT D

Projected Cash Flows (Open Group) – Partial Funding Approach

**Total Medical, Dental & Life Insurance - Partial Funding - 6.75% 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 7.05% 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	4,567,505	270,981	4,296,524	5.93%	99,986	354,621	75,000	429,621
2019	4,805,292	393,550	4,411,742	8.19%	109,103	180,976	100,000	280,976
2020	4,998,937	550,626	4,448,311	11.01%	113,715	203,631	125,000	328,631
2021	5,224,595	692,910	4,531,685	13.26%	119,274	211,302	100,000	311,302
2022	5,469,988	845,225	4,624,763	15.45%	125,013	209,787	100,000	309,787
2023	5,717,963	1,008,278	4,709,685	17.63%	132,111	232,368	100,000	332,368
2024	5,975,876	1,182,827	4,793,049	19.79%	138,864	245,648	100,000	345,648
2025	6,231,583	1,369,681	4,861,902	21.98%	143,429	269,347	100,000	369,347
2026	6,501,196	1,569,708	4,931,488	24.14%	153,200	284,467	100,000	384,467
2027	6,768,850	1,783,837	4,985,013	26.35%	161,718	315,862	100,000	415,862
2028	7,039,172	2,013,062	5,026,110	28.60%	169,514	341,074	100,000	441,074
2029	7,305,178	2,258,448	5,046,730	30.92%	179,608	378,100	100,000	478,100
2030	7,578,413	2,521,134	5,057,279	33.27%	187,731	397,844	100,000	497,844
2031	7,861,198	2,802,339	5,058,859	35.65%	197,148	417,183	100,000	517,183
2032	8,151,114	3,103,369	5,047,745	38.07%	205,435	435,525	100,000	535,525
2033	8,458,250	3,425,621	5,032,629	40.50%	215,188	449,850	100,000	549,850
2034	8,762,994	3,770,592	4,992,402	43.03%	225,613	471,879	100,000	571,879
2035	9,115,632	4,139,884	4,975,748	45.42%	234,765	452,621	100,000	552,621
2036	9,452,432	4,535,211	4,917,221	47.98%	246,660	458,420	100,000	558,420
2037	9,828,760	4,958,408	4,870,352	50.45%	257,084	484,776	100,000	584,776
2038	10,240,413	5,411,441	4,828,972	52.84%	269,233	507,134	100,000	607,134
2039	10,655,964	5,896,413	4,759,551	55.33%	281,593	527,623	100,000	627,623
2040	11,095,625	6,415,575	4,680,050	57.82%	293,831	560,807	100,000	660,807
2041	11,550,991	6,971,338	4,579,653	60.35%	307,647	589,469	100,000	689,469
2042	12,000,409	7,566,282	4,434,127	63.05%	323,826	628,262	100,000	728,262
2043	12,458,848	8,203,170	4,255,678	65.84%	339,547	669,844	100,000	769,844
2044	12,957,190	8,884,958	4,072,232	68.57%	356,566	694,512	100,000	794,512
2045	13,466,859	9,614,813	3,852,046	71.40%	374,512	719,481	100,000	819,481
2046	14,028,751	10,396,122	3,632,629	74.11%	393,811	735,409	100,000	835,409
2047	14,618,439	11,232,514	3,385,925	76.84%	413,572	765,910	100,000	865,910
2048	15,252,045	12,127,871	3,124,174	79.52%	434,782	779,406	100,000	879,406
2049	15,916,002	13,086,351	2,829,651	82.22%	456,590	818,925	100,000	918,925

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

**Total Medical, Dental & Life Insurance - 7.00% 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 7.05% 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	4,412,501	270,981	4,141,520	6.14%	93,536	354,621	75,000	429,621
2019	4,636,942	367,684	4,269,258	7.93%	102,065	180,976	141,452	322,428
2020	4,857,655	539,959	4,317,696	11.12%	106,553	203,631	141,452	345,083
2021	5,091,467	724,379	4,367,088	14.23%	112,027	211,302	141,452	352,754
2022	5,349,313	921,801	4,427,512	17.23%	117,679	209,787	141,452	351,239
2023	5,608,500	1,133,141	4,475,359	20.20%	124,643	232,368	141,452	373,820
2024	5,878,753	1,359,381	4,519,372	23.12%	131,310	245,648	141,452	387,100
2025	6,145,851	1,601,571	4,544,280	26.06%	135,475	269,347	141,452	410,799
2026	6,426,919	1,860,835	4,566,084	28.95%	145,083	284,467	141,452	425,919
2027	6,702,930	2,138,377	4,564,553	31.90%	153,540	315,862	141,452	457,314
2028	6,979,096	2,435,486	4,543,610	34.90%	160,665	341,074	141,452	482,526
2029	7,245,448	2,753,541	4,491,907	38.00%	170,450	378,100	141,452	519,552
2030	7,517,472	3,094,019	4,423,453	41.16%	178,071	397,844	141,452	539,296
2031	7,797,436	3,458,501	4,338,935	44.35%	187,035	417,183	141,452	558,635
2032	8,084,094	3,848,679	4,235,415	47.61%	194,831	435,525	141,452	576,977
2033	8,386,982	4,266,364	4,120,618	50.87%	204,058	449,850	141,452	591,302
2034	8,688,239	4,713,496	3,974,743	54.25%	213,929	471,879	141,452	613,331
2035	9,044,658	5,192,151	3,852,507	57.41%	222,579	452,621	141,452	594,073
2036	9,389,219	5,704,551	3,684,668	60.76%	233,874	458,420	141,452	599,872
2037	9,769,205	6,253,075	3,516,130	64.01%	243,676	484,776	141,452	626,228
2038	10,183,385	6,840,270	3,343,115	67.17%	255,112	507,134	141,452	648,586
2039	10,601,660	7,468,862	3,132,798	70.45%	266,735	527,623	141,452	669,075
2040	11,041,373	8,141,770	2,899,603	73.74%	278,187	560,807	141,452	702,259
2041	11,495,120	8,862,118	2,633,002	77.09%	291,198	589,469	141,452	730,921
2042	11,940,355	9,633,251	2,307,104	80.68%	306,466	628,262	141,452	769,714
2043	12,389,660	10,458,748	1,930,912	84.42%	321,275	669,844	141,452	811,296
2044	12,874,699	11,342,443	1,532,256	88.10%	337,280	694,512	141,452	835,964
2045	13,371,638	12,288,439	1,083,199	91.90%	354,162	719,481	141,452	860,933
2046	13,919,124	13,301,127	617,997	95.56%	372,300	735,409	141,452	876,861
2047	14,492,117	14,385,210	106,907	99.26%	390,820	765,910	141,452	907,362
2048	15,113,814	15,545,721	(431,907)	102.86%	410,714	779,406	106,907	886,313
2049	15,762,413	16,752,306	(989,893)	106.28%	431,226	818,925	0	818,925

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

**Total Medical, Dental & Life Insurance - 7.00% 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	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.]
		Position as of Measurement Date with expected 7.05% return						
2018	4,412,501	270,981	4,141,520	6.14%	97,649	354,621	75,000	429,621
2019	4,636,942	367,684	4,269,258	7.93%	106,553	180,976	105,908	286,884
2020	4,857,655	503,183	4,354,472	10.36%	112,027	203,631	109,085	312,716
2021	5,091,467	651,522	4,439,945	12.80%	99,986	211,302	112,358	323,660
2022	5,349,313	813,705	4,535,608	15.21%	102,065	209,787	115,729	325,516
2023	5,608,500	990,810	4,617,690	17.67%	106,553	232,368	119,201	351,569
2024	5,878,753	1,183,993	4,694,760	20.14%	112,027	245,648	122,777	368,425
2025	6,145,851	1,394,496	4,751,355	22.69%	117,679	269,347	126,460	395,807
2026	6,426,919	1,623,650	4,803,269	25.26%	124,643	284,467	130,254	414,721
2027	6,702,930	1,872,885	4,830,045	27.94%	131,310	315,862	134,162	450,024
2028	6,979,096	2,143,734	4,835,362	30.72%	135,475	341,074	138,187	479,261
2029	7,245,448	2,437,842	4,807,606	33.65%	145,083	378,100	142,333	520,433
2030	7,517,472	2,756,975	4,760,497	36.67%	153,540	397,844	146,603	544,447
2031	7,797,436	3,103,024	4,694,412	39.80%	160,665	417,183	151,001	568,184
2032	8,084,094	3,478,020	4,606,074	43.02%	170,450	435,525	155,531	591,056
2033	8,386,982	3,884,141	4,502,841	46.31%	178,071	449,850	160,197	610,047
2034	8,688,239	4,323,721	4,364,518	49.77%	187,035	471,879	165,003	636,882
2035	9,044,658	4,799,264	4,245,394	53.06%	194,831	452,621	169,953	622,574
2036	9,389,219	5,313,454	4,075,765	56.59%	204,058	458,420	175,052	633,472
2037	9,769,205	5,869,170	3,900,035	60.08%	213,929	484,776	180,304	665,080
2038	10,183,385	6,469,498	3,713,887	63.53%	222,579	507,134	185,713	692,847
2039	10,601,660	7,117,746	3,483,914	67.14%	233,874	527,623	191,284	718,907
2040	11,041,373	7,817,459	3,223,914	70.80%	243,676	560,807	197,023	757,830
2041	11,495,120	8,572,440	2,922,680	74.57%	255,112	589,469	202,934	792,403
2042	11,940,355	9,386,763	2,553,592	78.61%	266,735	628,262	209,022	837,284
2043	12,389,660	10,264,794	2,124,866	82.85%	278,187	669,844	215,293	885,137
2044	12,874,699	11,211,215	1,663,484	87.08%	291,198	694,512	221,752	916,264
2045	13,371,638	12,231,041	1,140,597	91.47%	306,466	719,481	228,405	947,886
2046	13,919,124	13,329,649	589,475	95.76%	321,275	735,409	235,257	970,666
2047	14,492,117	14,512,798	(20,681)	100.14%	337,280	765,910	242,315	1,008,225
2048	15,113,814	15,786,661	(672,847)	104.45%	354,162	779,406	0	779,406
2049	15,762,413	16,899,621	(1,137,208)	107.21%	372,300	818,925	0	818,925

## EXHIBIT E

### Projected Cash Flows (Open Group) – Funded Approach

#### Town of Hamilton

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

<b>Total Medical, Dental &amp; Life Insurance - Funding Annual Service Cost - 6.75% discount rate</b>
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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	VII. Present	VIII. Present	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)
						Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"	Value at 3.00% of Funding Service Cost beyond claims	Value at 3.00% of Total Funding Costs [VI. + VII.]			
June 30, 2017	4,567,505	99,986	354,621	75,000	429,621	354,621	75,000	429,621	270,981	4,296,524	4,296,524
June 30, 2018	4,805,292	109,103	180,976	(71,873)	109,103	175,705	(69,780)	105,925	364,272	4,441,020	4,311,670
June 30, 2019	4,998,937	113,715	203,631	(89,916)	113,715	191,942	(84,754)	107,188	316,987	4,681,950	4,413,187
June 30, 2020	5,224,595	119,274	211,302	(92,028)	119,274	193,371	(84,219)	109,152	248,468	4,976,127	4,553,861
June 30, 2021	5,469,988	125,013	209,787	(84,774)	125,013	186,393	(75,321)	111,072	173,212	5,296,776	4,706,117
June 30, 2022	5,717,963	132,111	232,368	(100,257)	132,111	200,443	(86,483)	113,960	100,130	5,617,833	4,845,992
June 30, 2023	5,975,876	138,864	245,648	(106,784)	138,864	205,726	(89,430)	116,296	6,632	5,969,244	4,999,148
June 30, 2024	6,231,583	143,429	269,347	(125,918)	143,429	219,004	(102,383)	116,621	0	6,231,583	5,066,847
June 30, 2025	6,501,196	153,200	284,467	(131,267)	153,200	224,561	(103,623)	120,938	0	6,501,196	5,132,104
June 30, 2026	6,768,850	161,718	315,862	(154,144)	161,718	242,082	(118,139)	123,943	0	6,768,850	5,187,760
June 30, 2027	7,039,172	169,514	341,074	(171,560)	169,514	253,791	(127,657)	126,134	0	7,039,172	5,237,805
June 30, 2028	7,305,178	179,608	378,100	(198,492)	179,608	273,147	(143,395)	129,752	0	7,305,178	5,277,416
June 30, 2029	7,578,413	187,731	397,844	(210,113)	187,731	279,040	(147,369)	131,671	0	7,578,413	5,315,346
June 30, 2030	7,861,198	197,148	417,183	(220,035)	197,148	284,081	(149,833)	134,248	0	7,861,198	5,353,093
June 30, 2031	8,151,114	205,435	435,525	(230,090)	205,435	287,933	(152,117)	135,816	0	8,151,114	5,388,847
June 30, 2032	8,458,250	215,188	449,850	(234,662)	215,188	288,742	(150,621)	138,121	0	8,458,250	5,429,029
June 30, 2033	8,762,994	225,613	471,879	(246,266)	225,613	294,059	(153,465)	140,594	0	8,762,994	5,460,808
June 30, 2034	9,115,632	234,765	452,621	(217,856)	234,765	273,843	(131,806)	142,037	0	9,115,632	5,515,107
June 30, 2035	9,452,432	246,660	458,420	(211,760)	246,660	269,273	(124,387)	144,886	0	9,452,432	5,552,308
June 30, 2036	9,828,760	257,084	484,776	(227,692)	257,084	276,461	(129,850)	146,611	0	9,828,760	5,605,204
June 30, 2037	10,240,413	269,233	507,134	(237,901)	269,233	280,788	(131,720)	149,068	0	10,240,413	5,669,868
June 30, 2038	10,655,964	281,593	527,623	(246,030)	281,593	283,623	(132,253)	151,370	0	10,655,964	5,728,106
June 30, 2039	11,095,625	293,831	560,807	(266,976)	293,831	292,681	(139,333)	153,348	0	11,095,625	5,790,723
June 30, 2040	11,550,991	307,647	589,469	(281,822)	307,647	298,679	(142,797)	155,882	0	11,550,991	5,852,792
June 30, 2041	12,000,409	323,826	628,262	(304,436)	323,826	309,063	(149,762)	159,301	0	12,000,409	5,903,406
June 30, 2042	12,458,848	339,547	669,844	(330,297)	339,547	319,921	(157,752)	162,169	0	12,458,848	5,950,415
June 30, 2043	12,957,190	356,566	694,512	(337,946)	356,566	322,042	(156,704)	165,338	0	12,957,190	6,008,181
June 30, 2044	13,466,859	374,512	719,481	(344,969)	374,512	323,902	(155,301)	168,601	0	13,466,859	6,062,633
June 30, 2045	14,028,751	393,811	735,409	(341,598)	393,811	321,430	(149,305)	172,125	0	14,028,751	6,131,641
June 30, 2046	14,618,439	413,572	765,910	(352,338)	413,572	325,011	(149,513)	175,498	0	14,618,439	6,203,281
June 30, 2047	15,252,045	434,782	779,406	(344,624)	434,782	321,105	(141,981)	179,124	0	15,252,045	6,283,641

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	39	4,567,505	4,567,505	354,621	354,621
June 30, 2018	40	4,805,292	4,665,332	180,976	175,705
June 30, 2019	41	4,998,937	4,711,978	203,631	191,942
June 30, 2020	43	5,224,595	4,781,245	211,302	193,371
June 30, 2021	45	5,469,988	4,860,013	209,787	186,393
June 30, 2022	46	5,717,963	4,932,365	232,368	200,443
June 30, 2023	47	5,975,876	5,004,702	245,648	205,726
June 30, 2024	49	6,231,583	5,066,847	269,347	219,004
June 30, 2025	50	6,501,196	5,132,104	284,467	224,561
June 30, 2026	52	6,768,850	5,187,760	315,862	242,082
June 30, 2027	54	7,039,172	5,237,805	341,074	253,791
June 30, 2028	55	7,305,178	5,277,416	378,100	273,147
June 30, 2029	57	7,578,413	5,315,346	397,844	279,040
June 30, 2030	57	7,861,198	5,353,093	417,183	284,081
June 30, 2031	58	8,151,114	5,388,847	435,525	287,933
June 30, 2032	59	8,458,250	5,429,029	449,850	288,742
June 30, 2033	59	8,762,994	5,460,808	471,879	294,059
June 30, 2034	59	9,115,632	5,515,107	452,621	273,843
June 30, 2035	59	9,452,432	5,552,308	458,420	269,273
June 30, 2036	58	9,828,760	5,605,204	484,776	276,461
June 30, 2037	58	10,240,413	5,669,868	507,134	280,788
June 30, 2038	58	10,655,964	5,728,106	527,623	283,623
June 30, 2039	58	11,095,625	5,790,723	560,807	292,681
June 30, 2040	58	11,550,991	5,852,792	589,469	298,679
June 30, 2041	58	12,000,409	5,903,406	628,262	309,063
June 30, 2042	59	12,458,848	5,950,415	669,844	319,921
June 30, 2043	59	12,957,190	6,008,181	694,512	322,042
June 30, 2044	59	13,466,859	6,062,633	719,481	323,902
June 30, 2045	59	14,028,751	6,131,641	735,409	321,430
June 30, 2046	59	14,618,439	6,203,281	765,910	325,011
June 30, 2047	59	15,252,045	6,283,641	779,406	321,105
June 30, 2048	59	15,916,002	6,366,196	818,925	327,559
June 30, 2049	59	16,604,679	6,448,212	861,420	334,521
June 30, 2050	58	17,327,506	6,532,925	900,563	339,536
June 30, 2051	58	18,098,476	6,624,855	925,098	338,627
June 30, 2052	58	18,902,890	6,717,773	974,331	346,261
June 30, 2053	58	19,742,818	6,811,912	1,024,219	353,389
June 30, 2054	58	20,641,695	6,914,616	1,050,915	352,039
June 30, 2055	57	21,652,489	7,041,956	1,099,691	357,648
June 30, 2056	57	22,663,263	7,156,006	1,131,872	357,393

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.