

**Town of Hamilton Other  
Postemployment Benefits Plan**

**GASB 75 Actuarial Valuation**

With a Valuation Date of July 1, 2017

As of the Measurement Date:  
July 1, 2017

As of the Measurement Date:  
July 1, 2018

For the Reporting Date:  
June 30, 2018

&

For the Reporting Date:  
June 30, 2019

Delivered October 10, 2018

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October 10, 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 July 1, 2017 and a Valuation Date of July 1, 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

**October 10, 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 July 1, 2017 with a Measurement Date of July 1, 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 less favorable than expected - for the year ending on the Measurement Date of July 1, 2017, the Plan saw an experience loss of \$556,505 or 7.85% of the beginning Total OPEB Liability ("TOL"). 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 experience loss on TOL is amortized into the net OPEB expense over time until fully recognized. Changes in assumptions increased disclosed liabilities by \$1.4 million.

Over the three year period, the TOL went from \$5,959,170 as of July 1, 2014 to \$7,754,655 as of July 1, 2017 for an increase of \$1,795,485. The Net OPEB Expense was \$213,849 for the year ending on the July 1, 2017 Measurement Date. 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.

- ✓ Due to the GASB 75 standards the discount rate was changed from 4.00% to 3.25% increasing the disclosed liability by \$950 thousand.
- ✓ 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 \$500 thousand.
- ✓ Assumption changes caused Normal Cost to increase by \$66 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 (3.25%) – Higher discount rates yield lower liabilities and vice versa
- ✓ Cost Sharing - Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance

EXECUTIVE SUMMARY

(continued)

**What is Implicit Subsidy? How does it impact us?**

The implicit subsidy arises because retirees who are not eligible for Medicare are charged the same premium as active employees, even though their actual medical costs are higher on average. Consequently, a portion of the premiums being paid for active employees are being used to “subsidize” the premiums of retirees. Actuarial Standards of Practice and GASB standards require the liability associated with this implicit subsidy to be valued. The chart below shows a breakdown of how implicit cost impacts reported cash flows and liabilities.

<b>Impact of Implicit Subsidy</b>		
<b>Impact on Liability</b>	<b>As of the Measurement Date</b>	
	<b><u>July 1, 2017</u></b>	<b><u>July 1, 2014</u></b>
I. Actuarial Accrued Liability	7,754,655	5,959,170
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>7,168,526</u>	<u>N/A</u>
III. Liability from Implicit Subsidy [I. - II.]	586,129	N/A

  

<b>Impact on Payments</b>	<b>For the Measurement Period Ending</b>	
	<b><u>July 1, 2017</u></b>	<b><u>July 1, 2014</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.

<b>Representative Plan Statistics</b>		
<b>Valuation Date</b>	<b>July 1, 2017</b>	<b>July 1, 2014</b>
<b>Measurement Date &amp; Period Ending</b>	<b>July 1, 2017</b>	<b>July 1, 2014</b>
<b>Reporting Date/Fiscal Year End</b>	<b>June 30, 2018</b>	<b>June 30, 2015</b>
Total OPEB Liability	7,754,655	5,959,170
Per Eligible Active Plan Participant	71,268	45,664
Per Retiree/Spouse Plan Participant	89,194	81,000
Total Annual Service Cost (annual benefit accrual)	232,636	184,224
Per Eligible Active Plan Participant	3,877	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	161.70%	230.10%
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 2022 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.

For the Period Ending on the Measurement Date of:	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"
July 1, 2017	39	7,754,655	354,621
July 1, 2022	46	8,371,209	200,443
July 1, 2027	54	8,889,287	253,791
July 1, 2032	59	9,213,687	288,742
July 1, 2037	58	9,622,738	280,788
July 1, 2042	59	10,099,692	319,921
July 1, 2047	59	10,666,113	321,105

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

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

**Town of Hamilton**  
**Assuming Pay-as-you-go Funding - 3.25% discount rate**  
**Comparison of Plan Liabilities to Prior Valuation**

Valuation Date	July 1, 2017	July 1, 2014
For the Measurement Period ending on the Measurement Date of:	July 1, 2017	July 1, 2014
For the Reporting Period & Fiscal Year ending on:	June 30, 2018	June 30, 2015
I. Present Value of Future Benefits		
A. Actives	7,171,237	4,749,293
B. Retirees/Disabled	3,478,554	3,401,999
C. Total	10,649,791	8,151,292
II. Present Value of Future Normal Cost	2,895,136	2,192,122
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	4,276,101	2,557,171
B. Retirees/Disabled	3,478,554	3,401,999
C. Total	7,754,655	5,959,170
IV. Fiduciary Net Position [Plan Assets]	0	0
V. Net OPEB Liability (Asset) [III. - IV.]	7,754,655	5,959,170
VI. Funded Ratio [IV. / III.]	0.00%	0.00%
VII. Annual Covered Payroll	4,794,875	2,589,736
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	161.7%	230.1%
IX. Number of Eligible Participants		
A. Actives	60	56
B. Retirees/Disabled	39	42
C. Total	99	98
X. Service Cost	232,636	184,224
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	232,202	N/A
XII. Projected Earnings on OPEB Plan Investments	0	N/A
XIII. Net Recognition of Deferred (Inflows)/Outflows	103,632	N/A
XIV. Financial Statement Expense [X.+XI.+XII.+XIII.]	568,470	N/A
XV. Employer Share of Costs	(354,621)	(334,061)
XVI. Employer (Payments)/Withdrawals to/from OPEB Trust	0	0
XVII. Total Employer Contribution [XV. + XVI.]	(354,621)	(334,061)
XVIII. Other Changes	0	N/A
XIX. Net OPEB Expense [XIV.+XVII.+XVIII.]	213,849	N/A
XX. Discount Rate	3.25%	4.00%

SECTION I  
PRINCIPAL RESULTS OF THE VALUATION  
(continued)

**Town of Hamilton**  
**Comparison of Discount Rates**

As of the July 1, 2017 Measurement Date

	<u>Pav-as-you-go Funding -</u> <u>3.25% discount rate</u>	<u>Funding - 6.75%</u> <u>discount rate</u>
I. Present Value of Future Benefits		
A. Actives	7,171,237	3,271,621
B. Retirees/Disabled	<u>3,478,554</u>	<u>2,174,573</u>
C. Total	10,649,791	5,446,194
II. Present Value of Future Normal Cost	2,895,136	877,222
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	4,276,101	2,394,399
B. Retirees/Disabled	<u>3,478,554</u>	<u>2,174,573</u>
C. Total	7,754,655	4,568,972
IV. Fiduciary Net Position [Plan Assets]	0	0
V. Net OPEB Liability (Asset) [III. - IV.]	7,754,655	4,568,972
VI. Funded Ratio [IV. / III.]	0.00%	0.00%
VII. Annual Covered Payroll	4,794,875	4,794,875
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	161.7%	95.3%
IX. Number of Eligible Participants		
A. Actives	60	60
B. Retirees/Disabled	<u>39</u>	<u>39</u>
C. Total	99	99
<b>For the Reporting Date and Fiscal Year Ending June 30, 2018</b>		
X. Service Cost	232,636	94,786
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	232,202	276,515
XII. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0
XIII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	103,632	103,632
XIV. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0
XV. Projected Earnings on OPEB Plan Investments	0	(2,599)
XVI. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	<u>0</u>	<u>0</u>
XVII. Financial Statement Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.]	568,470	472,334
XVIII. Employer Share of Costs	(354,621)	(354,621)
XIX. Employer (Payments)/Withdrawals to/from OPEB Trust	0	(75,000)
XX. Total Employer Contribution [XVIII. + XIX.]	(354,621)	(429,621)
XXI. Other Changes	0	0
XXII. Net OPEB Expense [XVII.+XX.+XXI.]	213,849	42,713

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Hamilton**

**Plan Liabilities as of the July 1, 2017 Measurement Date**

**Assuming Pay-as-you-go Funding - 3.25% discount rate**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	6,961,494	0	102,052	107,691	7,171,237
B. Retirees/Disabled	<u>3,194,994</u>	<u>0</u>	<u>225,859</u>	<u>57,701</u>	<u>3,478,554</u>
C. Total	10,156,488	0	327,911	165,392	10,649,791
II. Present Value of Future Normal Cost	2,798,084	0	33,816	63,236	2,895,136
III. Total OPEB Liability					
A. Actives	4,163,410	0	68,236	44,455	4,276,101
B. Retirees/Disabled	<u>3,194,994</u>	<u>0</u>	<u>225,859</u>	<u>57,701</u>	<u>3,478,554</u>
C. Total	7,358,404	0	294,095	102,156	7,754,655
IV. Fiduciary Net Position [Plan Assets]	0	0	0	0	0
V. Net OPEB Liability (Asset) [III. - IV.]	7,358,404	0	294,095	102,156	7,754,655
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	153.5%	0.0%	6.1%	2.1%	161.7%
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	223,479	0	4,071	5,086	232,636
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	219,210	0	9,507	3,485	232,202
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	98,337	0	3,930	1,365	103,632
XIV. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0
XV. Projected Earnings on OPEB Plan Investments	0	0	0	0	0
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.]	541,026	0	17,508	9,936	568,470
XVIII. Employer Share of Costs	(332,312)	0	(22,309)	0	(354,621)
XIX. Employer (Payments)/Withdrawals to/from OPEB Trust	0	0	0	0	0
XX. Total Employer Contribution [XVIII. + XIX.]	(332,312)	0	(22,309)	0	(354,621)
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.]	208,714	0	(4,801)	9,936	213,849

**SECTION I**  
**PRINCIPAL RESULTS OF THE VALUATION**  
(continued)

**Town of Hamilton**  
**Plan Liabilities as of the July 1, 2017 Measurement Date**  
**Assuming Pay-as-you-go Funding - 3.25% discount rate**

	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	1,345,334	3,735,411	959,698	493,930	636,864	7,171,237
B. Retirees/Disabled	<u>486,665</u>	<u>1,438,169</u>	<u>783,804</u>	<u>347,981</u>	<u>421,935</u>	<u>3,478,554</u>
C. Total	1,831,999	5,173,580	1,743,502	841,911	1,058,799	10,649,791
II. Present Value of Future Normal Cost	673,339	1,449,511	365,080	268,238	138,968	2,895,136
III. Total OPEB Liability						
A. Actives	671,995	2,285,900	594,618	225,692	497,896	4,276,101
B. Retirees/Disabled	<u>486,665</u>	<u>1,438,169</u>	<u>783,804</u>	<u>347,981</u>	<u>421,935</u>	<u>3,478,554</u>
C. Total	1,158,660	3,724,069	1,378,422	573,673	919,831	7,754,655
IV. Fiduciary Net Position [Plan Assets]	0	0	0	0	0	0
V. Net OPEB Liability (Asset) [III. - IV.]	1,158,660	3,724,069	1,378,422	573,673	919,831	7,754,655
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	104.9%	154.2%	156.0%	637.4%	305.5%	161.7%
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	69,727	103,739	30,182	18,888	10,100	232,636
X. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	35,797	111,523	40,669	17,085	27,128	232,202
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	15,485	49,768	18,421	7,666	12,292	103,632
XIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0	0
XIV. Projected Earnings on OPEB Plan Investments	0	0	0	0	0	0
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.]	121,009	265,030	89,272	43,639	49,520	568,470
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	0	0	0	0	0	0
XIX. Total Employer Contribution [XVII. + XVIII.]	(62,537)	(132,767)	(94,203)	(46,342)	(18,772)	(354,621)
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.]	58,472	132,263	(4,931)	(2,703)	30,748	213,849

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Hamilton**  
**Assuming Pay-as-you-go Funding - 3.25% discount rate**  
**For the Period ending on the July 1, 2017 Measurement Date**

	<u>Present Value of Future</u> <u>Benefits</u>	<u>Total OPEB Liability</u> <u>(Individual Entry Age</u> <u>Normal)</u>	<u>Service Cost</u>
<b>Actives</b>			
Under Age 65			
A. Participants	993,156	900,385	41,949
B. Spouses	<u>758,656</u>	<u>712,195</u>	<u>31,637</u>
C. Total	1,751,812	1,612,580	73,586
Age 65 and Over			
A. Participants	4,123,235	1,505,069	92,057
B. Spouses	<u>1,296,190</u>	<u>1,158,452</u>	<u>66,993</u>
C. Total	5,419,425	2,663,521	159,050
Actives Total			
A. Participants	5,116,391	2,405,454	134,006
B. Spouses	<u>2,054,846</u>	<u>1,870,647</u>	<u>98,630</u>
C. Total	7,171,237	4,276,101	232,636
<b>Retirees/Disabled</b>			
Under Age 65			
A. Participants	520,888	520,888	0
B. Spouses	<u>170,075</u>	<u>170,075</u>	<u>0</u>
C. Total	690,963	690,963	0
Age 65 and Over			
A. Participants	2,547,685	2,547,685	0
B. Spouses	<u>239,906</u>	<u>239,906</u>	<u>0</u>
C. Total	2,787,591	2,787,591	0
Retirees/Disabled Total			
A. Participants	3,068,573	3,068,573	0
B. Spouses	<u>409,981</u>	<u>409,981</u>	<u>0</u>
C. Total	3,478,554	3,478,554	0
<b>Total Population</b>			
A. Participants	8,184,964	5,474,027	134,006
B. Spouses	<u>2,464,827</u>	<u>2,280,628</u>	<u>98,630</u>
C. Total	10,649,791	7,754,655	232,636

## 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.

## OVERVIEW OF GASB 74 AND 75

(continued)

### **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.

### **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.

## 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>Excise Tax</u>	Under the Patient Protection and Affordable Care Act ("PPACA"), a 40% tax will be imposed on the cost of medical benefits in excess of a specified threshold.
<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 IIIACTUARIAL COST METHOD, ASSET VALUATION METHOD  
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS

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

Pre-Retirement Mortality

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

Post-Retirement Mortality

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

Disabled Mortality

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

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

3.25% 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 July 1, 2017 (source: S&P Municipal Bond 20-Year High Grade Index - SAPIHG)

Excise Tax

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

Employee Termination

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

<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%	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</u>	<u>Non Public Safety</u>	<u>Public Safety</u>
	<u>Safety Male</u>	<u>Female</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 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 employees and 70% of female employees who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement. If provided, the actual census information was used. Otherwise it was assumed that a male spouse is three years older than a female spouse and same sex spouses are assumed to be the same age.

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	Aged (F) Average Claims	Aged (M) Average Claims
24 & Under	8,293	3,470
25 to 29	8,293	3,736
30 to 34	8,293	4,501
35 to 39	8,293	5,373
40 to 44	8,293	6,321
45 to 49	9,203	7,541
50 to 54	10,107	9,109
55 to 59	10,999	11,081
60 to 64	12,440	13,287
65 to 69	13,704	14,639
70 & Over	15,145	16,163

**ALL RETIREES AND SPOUSES - NOT  
MEDICARE ELIGIBLE**

Age Bracket	Aged (F) Average Claims	Aged (M) Average Claims
44 & Under	8,293	6,321
45 to 49	9,203	7,541
50 to 54	10,107	9,109
55 to 59	10,999	11,081
60 to 64	12,440	13,287
65 to 69	13,704	14,639
70 to 74	15,145	16,163
75 to 79	16,390	17,503
80 to 84	17,218	18,394
85 to 89	18,103	19,336
90 & Over	19,026	20,322

**ALL RETIREES AND SPOUSES - MEDICARE  
ELIGIBLE**

Age Bracket	Aged (F) Average Claims	Aged (M) Average Claims
65 to 69	4,219	4,507
70 to 74	4,662	4,975
75 to 79	5,046	5,388
80 to 84	5,300	5,662
85 to 89	5,573	5,952
90 & Over	5,857	6,256

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 July 1, 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 July 1, 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 period ending on the July 1, 2017 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$354,621. The Town also made a contribution to an OPEB Trust of \$0 for a total contribution during the measurement period of \$354,621 to be reported on the financial statement for the fiscal year ending June 30, 2018.



EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 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	23.33%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	11.67%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	13.33%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	6.67%	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 July 1, 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 Period Ending on the July 1, 2017 to be Reported on June 30, 2018</u></b>	
I. Service Cost	232,636
II. 30 year level flat dollar amortization of NOL at 3.25%	<u>395,669</u>
III. Actuarial Determined Contribution [I. + II.]	628,305
IV. Contributions in relation to the actuarially determined contribution	<u>(354,621)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>273,684</u>
Covered employee payroll	4,794,875
Contributions as a % of covered employee payroll	7.40%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**8. FUNDED STATUS AND FUNDING PROGRESS**

As of the July 1, 2017 Measurement Date, the plan was 0.00% funded. The Total OPEB Liability (TOL) for benefits was \$7,754,655, and the Fiduciary Net Position was \$ 0, resulting in a Net OPEB Liability (NOL) of \$7,754,655. 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 161.7%.

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

Fiscal Year	Measurement Date	Fiduciary Net Position	Total OPEB Liability	Net OPEB Liability	Funded Ratio	Covered Payroll	NOL as a % of Covered Payroll
2020	07/01/2019 (est.)	\$0	\$8,442,232	\$8,442,232	0.0%	\$5,086,883	166.0%
2019	07/01/2018 (est.)	\$0	\$8,098,536	\$8,098,536	0.0%	\$4,938,721	164.0%
2018	07/01/2017	\$0	\$7,754,655	\$7,754,655	0.0%	\$4,794,875	161.7%
2017	07/01/2016	\$0	\$6,456,754	\$6,456,754	0.0%	N/A	N/A
2016	07/01/2015	\$0	\$6,205,988	\$6,205,988	0.0%	N/A	N/A
2015	07/01/2014	\$0	\$5,959,170	\$5,959,170	0.0%	\$2,589,736	230.1%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

9. FIDUCIARY NET POSITION

<b>Statement of Fiduciary Net Position</b>		
<b>July 1, 2017 and July 1, 2018</b>		
	<u>July 1, 2018 (Projected)</u>	<u>July 1, 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	0	0
VIII. Stocks	0	0
IX. Cash and cash equivalents	0	0
X. Real estate	0	0
XI. Alternative investments	<u>0</u>	<u>0</u>
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	<u>0</u>	<u>0</u>
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
<b>Total Assets</b>	0	0
<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>	0	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

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

<b>Statement of Changes in Fiduciary Net Position</b>	
<b><u>For the Year Ending on the July 1, 2017 Measurement Date</u></b>	
<b>Additions</b>	
<u>Contributions</u>	
Employer Contributions to OPEB Trust	0
Total Contributions	0
<u>Investment Income / (loss)</u>	
Interest	0
Dividends	0
Equity fund income, net	0
Net increase in fair value of investments	0
Securities lending income	0
Less investment expenses:	
Direct investment expense	0
Securities lending management fees	0
Securities lending borrower rebates	0
Net investment income	0
Other income	0
<b>Total Additions</b>	<b>0</b>
<b>Deductions</b>	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
<b>Total deductions</b>	<b>0</b>
<b>Net increase (decrease)</b>	<b>0</b>
<b>Net Position restricted for OPEB</b>	
As of July 1, 2016	0
As of July 1, 2017	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**10. OPEB LIABILITY, OPEB EXPENSE AND ADC**

	Fiscal Year Ending June 30, 2018					
	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. Total OPEB Liability	1,158,660	3,724,069	1,378,422	573,673	919,831	7,754,655
II. Fiduciary Net Position as of July 1, 2017	-	-	-	-	-	-
III. Net OPEB Liability (Asset) [I. - II.]	1,158,660	3,724,069	1,378,422	573,673	919,831	7,754,655
IV. Service Cost	69,727	103,739	30,182	18,888	10,100	232,636
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	35,797	111,523	40,669	17,085	27,128	232,202
VI. Projected Earnings on OPEB Plan Investments	-	-	-	-	-	-
VII. Net Recognition of Deferred (Inflows)/Outflows	15,485	49,768	18,421	7,666	12,292	103,632
VIII. Financial Statement Expense [IV. + V. + VI. + VII. + VIII. + VI. + VII.]	121,009	265,030	89,272	43,639	49,520	568,470
IX. Employer Share of Costs	(62,537)	(132,767)	(94,203)	(46,342)	(18,772)	(354,621)
X. Employer (Payments) Withdrawals to/from OPEB Trust	-	-	-	-	-	-
XI. Total Employer Contribution [IX. + X.]	(62,537)	(132,767)	(94,203)	(46,342)	(18,772)	(354,621)
XII. Net OPEB Expense [VIII. + XI.]	58,472	132,263	(4,931)	(2,703)	30,748	213,849
XIII. Actuarial Determined Contribution (ADC)	128,845	293,754	100,514	48,159	57,033	628,305
XIV. Total Expected Contribution	62,537	132,767	94,203	46,342	18,772	354,621
XV. Percentage of ADC Contributed [XIV. / XIII.]	49%	45%	94%	96%	33%	56%

	Fiscal Year Ending June 30, 2019					
	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. Total OPEB Liability	1,246,533	3,899,218	1,410,147	590,675	951,963	8,098,536
II. Fiduciary Net Position as of July 1, 2018	-	-	-	-	-	-
III. Net OPEB Liability (Asset) [I. - II.]	1,246,533	3,899,218	1,410,147	590,675	951,963	8,098,536
IV. Service Cost	80,047	119,094	34,650	21,684	11,595	267,070
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	39,741	123,811	45,150	18,968	30,117	257,787
VI. Projected Earnings on OPEB plan investments	-	-	-	-	-	-
VII. Net Recognition of Deferred (Inflows)/Outflows	15,485	49,768	18,421	7,666	12,292	103,632
VIII. Financial Statement Expense [IV. + V. + VI. + VII.]	135,273	292,673	98,221	48,318	54,004	628,489
IX. Employer Share of Costs	(31,915)	(67,756)	(48,075)	(23,650)	(9,580)	(180,976)
X. Employer (Payments) Withdrawals to/from OPEB Trust	-	-	-	-	-	-
XI. Total Employer Contribution [IX. + X.]	(31,915)	(67,756)	(48,075)	(23,650)	(9,580)	(180,976)
XII. Net OPEB Expense [VIII. + XI.]	103,358	224,917	50,146	24,668	44,424	447,513
XIII. Actuarial Determined Contribution (ADC)	143,649	318,046	106,601	51,822	60,167	680,285
XIV. Total Expected Contribution	31,915	67,756	48,075	23,650	9,580	180,976
XV. Percentage of ADC Contributed [XIV. / XIII.]	22%	21%	45%	46%	16%	27%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

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

Valuation Date	July 1, 2017	July 1, 2017
For the Measurement Period ending on the Measurement Date of:	July 1, 2017	July 1, 2018
For the Reporting Period & Fiscal Year ending on:	June 30, 2018	June 30, 2019

<b>Source of Deferred Inflow/Outflow</b>		
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	452,873	349,241
II. Deferred (Inflow)/Outflow from Investment Experience	0	0
III. Deferred (Inflow)/Outflow from Changes in Benefit Terms	0	0
IV. Deferred (Inflow)/Outflow from Changes in Assumptions	0	0

<b>Change in Deferred Inflow/Outflow</b>		
I. Deferred Outflow at the beginning of the period	0	452,873
II. Deferred Outflow created during the period	556,505	0
III. Deferred Outflow recognized during the period	103,632	103,632
IV. Change in Deferred Outflow (II. - III. )	452,873	103,632
V. Deferred Outflow at end of the period (I. + IV. )	452,873	349,241
VI. Deferred Inflow at the beginning of the period	0	0
VII. Deferred Inflow created during the period	0	0
VIII. Deferred Inflow recognized during the period	0	0
IX. Deferred Inflow at end of the period (VII. - VIII. )	0	0
X. Deferred Inflow at end of the period (VI. + IX. )	0	0

<b>Net OPEB Liability</b>		
I. Net OPEB Liability at beginning of period	7,087,933	7,754,655
II. Service Cost	232,636	267,070
III. Interest on Total OPEB Liability, Service Cost, and Payments	232,202	257,787
IV. Projected Investment Income	0	0
V. Total Employer Contributions	(354,621)	(180,976)
VI. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + IV. + V. )	110,217	343,881
VII. Deferred Outflow created during the period	556,505	0
VIII. Deferred Inflow created during the period	0	0
IX. Net OPEB Liability at end of period (I. + VI. + VII. + VIII. )	7,754,655	8,098,536

<b>Net OPEB Expense</b>		
I. Service Cost	232,636	267,070
II. Interest on Total OPEB Liability, Service Cost, and Payments	232,202	257,787
III. Projected Investment Income	0	0
IV. Recognition of Deferred (Inflow)/Outflow	103,632	103,632
V. Financial Statement Expense (I. + II. + III. + IV. )	568,470	628,489
VI. Benefit Payments	(354,621)	(180,976)
VII. Contributions to Trust	0	0
VIII. Total Employer Payments (VI. + VII. )	(354,621)	(180,976)
IX. Total Employer Payments (V. + VIII. )	213,849	447,513

Valuation Date	July 1, 2017	July 1, 2017
For the Measurement Period ending on the Measurement Date of:	July 1, 2017	July 1, 2018
For the Reporting Period & Fiscal Year ending on:	June 30, 2018	June 30, 2019

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**12. EFFECT OF 1% CHANGE IN HEALTHCARE TREND**

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

	<u>1% Decrease (4.00%)</u>	<u>Current Trend Rate (5.00%)</u>	<u>1% Increase (6.00%)</u>
I. Total OPEB Liability	5,459,662	7,754,655	10,783,924
II. Fiduciary Net Position	<u>0</u>	<u>0</u>	<u>0</u>
III. Net OPEB Liability (Asset) [I.-II.]	5,459,662	7,754,655	10,783,924
IV. Service Cost	136,311	232,636	367,316

**Impact of a 1% Change in the Healthcare Trend Rate as of the July 1, 2018 Measurement Date**

	<u>1% Decrease (4.00%)</u>	<u>Current Trend Rate (5.00%)</u>	<u>1% Increase (6.00%)</u>
I. Total OPEB Liability	5,698,434	8,098,536	11,266,544
II. Fiduciary Net Position	<u>0</u>	<u>0</u>	<u>0</u>
III. Net OPEB Liability (Asset) [I.-II.]	5,698,434	8,098,536	11,266,544
IV. Service Cost	156,273	267,070	421,983

**13. EFFECT OF 1% CHANGE IN DISCOUNT RATES**

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

	<u>1% Decrease (2.25%)</u>	<u>Current Discount Rate (3.25%)</u>	<u>1% Increase (4.25%)</u>
I. Total OPEB Liability	9,297,202	7,754,655	6,559,965
II. Fiduciary Net Position	<u>0</u>	<u>0</u>	<u>0</u>
III. Net OPEB Liability (Asset) [I.-II.]	9,297,202	7,754,655	6,559,965
IV. Service Cost	309,243	232,636	177,132

**Impact of a 1% Change in the Discount Rate as of the July 1, 2018 Measurement Date**

	<u>1% Decrease (2.25%)</u>	<u>Current Discount Rate (3.25%)</u>	<u>1% Increase (4.25%)</u>
I. Total OPEB Liability	9,709,487	8,098,536	6,850,868
II. Fiduciary Net Position	<u>0</u>	<u>0</u>	<u>0</u>
III. Net OPEB Liability (Asset) [I.-II.]	9,709,487	8,098,536	6,850,868
IV. Service Cost	355,016	267,070	203,350



EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE

(As of the July 1, 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: 3.25% per annum (previously 4.00%)  
Healthcare Trend Rates

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

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

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE

(As of the July 1, 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, Town of Hamilton has not 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	232,636
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	232,202
III. Deferred (Inflows)/Outflows from Plan Design Changes*	0
IV. Deferred (Inflows)/Outflows from Plan Experience**	103,632
V. Deferred (Inflows)/Outflows from Changes of Assumptions**	0
VI. Projected earnings on OPEB plan investments	0
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	0
VIII. Total Employer Contributions	(354,621)
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>213,849</b>

\* Recognized Immediately

\*\* Amortized over 5.37 years

\*\*\* Amortized over 5 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 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 July 1, 2016 GASB 45</b>	6,456,754	0	6,456,754
<b>II. Change in Assumptions for GASB 75</b>	<u>631,179</u>	<u>0</u>	<u>631,179</u>
<b>III. Balances at July 1, 2016 GASB 75 [I. + II.]</b>	<b>7,087,933</b>	0	7,087,933
<b>Changes for the year:</b>			
IV. Service Cost	232,636	0	232,636
V. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	232,202	0	232,202
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	556,505	0	556,505
IX. Net Investment Income	0	0	0
X. Employer Contributions to Trust	0	354,621	(354,621)
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.]	(354,621)	0	(354,621)
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>666,722</u>	<u>0</u>	<u>666,722</u>
<b>XVII. Balances at July 1, 2017 [III.+XVII.]</b>	7,754,655	0	7,754,655

\* Recognized Immediately

\*\* Amortized over 5.37 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 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>Assets as of July 1, 2016</b>	<b>Assets as of July 1, 2017</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	0	0
Stocks	0	0
Cash and cash equivalents	0	0
Real estate	0	0
Alternative investments	0	0
Invested securities lending cash collateral	0	0
<b>Liabilities</b>		
Securities lending cash collateral	0	0
Payable to brokers for unsettled trades	0	0
Total OPEB plan investments	0	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 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	0	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	0	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	0	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	0	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
<u>June</u>	<u>0</u>	0	0.0000
II. Total net external cash flow	0		
III. Earnings and increase in fair value	0		
IV. Ending value - June 30, 2017 [I.+II.+III.]	0		
Money Weighted Rate of Return	N/A		
Asset Value - June 30, 2017	0		

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**19. PLAN CASH FLOWS**

<b>Aggregate External (Noninvestment Cash Flows)</b>	
<b><u>For the Year Ending on the July 1, 2017 Measurement Date</u></b>	
<b>Additions</b>	
<u>Contributions</u>	
Member contributions	0
Employer contributions	0
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	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 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>For the Year Ending on the July 1, 2017 Measurement Date</b></u>	
I. Total OPEB plan investments on July 1, 2016	0
II. Aggregate external cash flows	0
III. Net investment income	<u>0</u>
IV. Total OPEB plan investments on July 1, 2017 [I.+II.+III.]	<u><u>0</u></u>

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**20. PLAN PROJECTION DISCLOSURES**

**Projection of Contributions using a July 1, 2017 Valuation Date**

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
July 1, 2017	4,794,875	0	4,794,875	0	354,621	0	354,621
July 1, 2018	4,511,018	427,703	4,938,721	0	180,975	0	180,975
July 1, 2019	4,281,458	805,425	5,086,883	0	203,631	0	203,631
July 1, 2020	4,049,109	1,190,380	5,239,489	0	211,302	0	211,302
July 1, 2021	3,894,462	1,502,212	5,396,674	0	209,787	0	209,787
July 1, 2022	3,730,681	1,827,893	5,558,574	0	232,368	0	232,368
July 1, 2023	3,507,386	2,217,945	5,725,331	0	245,648	0	245,648
July 1, 2024	3,336,786	2,560,305	5,897,091	0	269,347	0	269,347
July 1, 2025	3,112,898	2,961,106	6,074,004	0	284,467	0	284,467
July 1, 2026	2,801,426	3,454,798	6,256,224	0	315,862	0	315,862
July 1, 2027	2,549,500	3,894,411	6,443,911	0	341,074	0	341,074
July 1, 2028	2,315,640	4,321,588	6,637,228	0	378,100	0	378,100
July 1, 2029	2,138,693	4,697,652	6,836,345	0	396,059	1,785	397,844
July 1, 2030	1,949,556	5,091,879	7,041,435	0	412,547	4,636	417,183
July 1, 2031	1,777,932	5,474,746	7,252,678	0	426,738	8,787	435,525
July 1, 2032	1,654,419	5,815,839	7,470,258	0	435,375	14,475	449,850
July 1, 2033	1,502,698	6,191,668	7,694,366	0	450,433	21,446	471,879
July 1, 2034	1,396,422	6,528,775	7,925,197	0	425,097	27,524	452,621
July 1, 2035	1,277,842	6,885,111	8,162,953	0	423,545	34,875	458,420
July 1, 2036	1,202,937	7,204,905	8,407,842	0	441,619	43,157	484,776
July 1, 2037	1,127,681	7,532,396	8,660,077	0	455,782	51,352	507,134
July 1, 2038	1,042,869	7,877,010	8,919,879	0	466,806	60,817	527,623
July 1, 2039	947,191	8,240,284	9,187,475	0	487,604	73,203	560,807
July 1, 2040	858,437	8,604,662	9,463,099	0	500,948	88,521	589,469
July 1, 2041	770,179	8,976,813	9,746,992	0	520,736	107,526	628,262
July 1, 2042	689,454	9,349,948	10,039,402	0	540,132	129,712	669,844
July 1, 2043	603,789	9,736,795	10,340,584	0	539,800	154,712	694,512
July 1, 2044	525,478	10,125,324	10,650,802	0	542,293	177,188	719,481
July 1, 2045	464,298	10,506,028	10,970,326	0	533,589	201,820	735,409
July 1, 2046	414,302	10,885,134	11,299,436	0	536,869	229,041	765,910
July 1, 2047	343,492	11,294,927	11,638,419	0	523,943	255,463	779,406
July 1, 2048	278,062	11,709,510	11,987,572	0	533,833	285,092	818,925
July 1, 2049	248,301	12,098,898	12,347,199	0	542,332	319,088	861,420
July 1, 2050	208,081	12,509,534	12,717,615	0	545,345	355,218	900,563
July 1, 2051	174,525	12,924,618	13,099,143	0	529,279	395,819	925,098
July 1, 2052	144,513	13,347,604	13,492,117	0	535,368	438,963	974,331
July 1, 2053	119,205	13,777,676	13,896,881	0	539,677	484,542	1,024,219
July 1, 2054	95,865	14,217,922	14,313,787	0	519,609	531,306	1,050,915
July 1, 2055	70,517	14,672,684	14,743,201	0	519,424	580,267	1,099,691
July 1, 2056	55,417	15,130,080	15,185,497	0	499,729	632,143	1,131,872



EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**Projection of Contributions using a July 1, 2017 Valuation Date (Continued)**

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
July 1, 2057	45,088	15,595,974	15,641,062	0	484,670	686,333	1,171,003
July 1, 2058	35,368	16,074,926	16,110,294	0	475,099	744,115	1,219,214
July 1, 2059	22,097	16,571,506	16,593,603	0	451,334	806,252	1,257,586
July 1, 2060	12,515	17,078,896	17,091,411	0	433,263	870,966	1,304,229
July 1, 2061	7,907	17,596,246	17,604,153	0	419,914	940,867	1,360,781
July 1, 2062	4,738	18,127,540	18,132,278	0	407,608	1,015,125	1,422,733
July 1, 2063	2,901	18,673,345	18,676,246	0	392,141	1,093,152	1,485,293
July 1, 2064	2,227	19,234,306	19,236,533	0	378,328	1,175,018	1,553,346
July 1, 2065	1,707	19,811,922	19,813,629	0	364,370	1,261,080	1,625,450
July 1, 2066	1,219	20,406,819	20,408,038	0	348,131	1,351,375	1,699,506
July 1, 2067	0	21,020,279	21,020,279	0	334,166	1,445,601	1,779,767
July 1, 2068	0	21,650,887	21,650,887	0	322,618	1,544,582	1,867,200
July 1, 2069	0	22,300,414	22,300,414	0	311,789	1,648,277	1,960,066
July 1, 2070	0	22,969,426	22,969,426	0	300,881	1,756,572	2,057,453
July 1, 2071	0	23,658,509	23,658,509	0	289,518	1,870,910	2,160,428
July 1, 2072	0	24,368,264	24,368,264	0	277,695	1,990,346	2,268,041
July 1, 2073	0	25,099,312	25,099,312	0	265,308	2,115,029	2,380,337
July 1, 2074	0	25,852,291	25,852,291	0	252,415	2,245,918	2,498,333
July 1, 2075	0	26,627,860	26,627,860	0	238,991	2,382,502	2,621,493
July 1, 2076	0	27,426,696	27,426,696	0	225,155	2,525,254	2,750,409
July 1, 2077	0	28,249,497	28,249,497	0	211,174	2,674,107	2,885,281
July 1, 2078	0	29,096,982	29,096,982	0	197,230	2,829,841	3,027,071
July 1, 2079	0	29,969,891	29,969,891	0	183,407	2,992,754	3,176,161
July 1, 2080	0	30,868,988	30,868,988	0	169,727	3,162,742	3,332,469
July 1, 2081	0	31,795,058	31,795,058	0	156,315	3,341,190	3,497,505
July 1, 2082	0	32,748,910	32,748,910	0	143,052	3,528,021	3,671,073
July 1, 2083	0	33,731,377	33,731,377	0	130,147	3,723,896	3,854,043
July 1, 2084	0	34,743,318	34,743,318	0	117,483	3,929,458	4,046,941
July 1, 2085	0	35,785,618	35,785,618	0	105,447	4,144,799	4,250,246
July 1, 2086	0	36,859,187	36,859,187	0	93,670	4,370,719	4,464,389
July 1, 2087	0	37,964,963	37,964,963	0	82,491	4,607,699	4,690,190
July 1, 2088	0	39,103,912	39,103,912	0	71,874	4,856,579	4,928,453
July 1, 2089	0	40,277,029	40,277,029	0	61,960	5,117,647	5,179,607
July 1, 2090	0	41,485,340	41,485,340	0	52,952	5,392,054	5,445,006
July 1, 2091	0	42,729,900	42,729,900	0	44,757	5,680,457	5,725,214
July 1, 2092	0	44,011,797	44,011,797	0	37,465	5,983,521	6,020,986
July 1, 2093	0	45,332,151	45,332,151	0	31,005	6,302,125	6,333,130
July 1, 2094	0	46,692,116	46,692,116	0	25,419	6,637,052	6,662,471
July 1, 2095	0	48,092,879	48,092,879	0	20,582	6,989,138	7,009,720

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**20. PLAN PROJECTION DISCLOSURES (CONTINUED)**

Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2017 Valuation Date									
For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Portion of Employer Contributions for Current Plan Members	III. Total Benefit Payments	IV. Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Investment Earnings	VIII. Ending Fiduciary Net Position for Current Plan Members	
July 1, 2017	0	354,621	354,621	0	0	0	0	0	
July 1, 2018	0	180,975	180,975	0	0	0	0	0	
July 1, 2019	0	203,631	203,631	0	0	0	0	0	
July 1, 2020	0	211,302	211,302	0	0	0	0	0	
July 1, 2021	0	209,787	209,787	0	0	0	0	0	
July 1, 2022	0	232,368	232,368	0	0	0	0	0	
July 1, 2023	0	245,648	245,648	0	0	0	0	0	
July 1, 2024	0	269,347	269,347	0	0	0	0	0	
July 1, 2025	0	284,467	284,467	0	0	0	0	0	
July 1, 2026	0	315,862	315,862	0	0	0	0	0	
July 1, 2027	0	341,074	341,074	0	0	0	0	0	
July 1, 2028	0	378,100	378,100	0	0	0	0	0	
July 1, 2029	0	396,059	397,844	0	0	0	0	0	
July 1, 2030	0	412,547	417,183	0	0	0	0	0	
July 1, 2031	0	426,738	435,525	0	0	0	0	0	
July 1, 2032	0	435,375	449,850	0	0	0	0	0	
July 1, 2033	0	450,433	471,879	0	0	0	0	0	
July 1, 2034	0	425,097	452,621	0	0	0	0	0	
July 1, 2035	0	423,545	458,420	0	0	0	0	0	
July 1, 2036	0	441,619	484,776	0	0	0	0	0	
July 1, 2037	0	455,782	507,134	0	0	0	0	0	
July 1, 2038	0	466,806	527,623	0	0	0	0	0	
July 1, 2039	0	487,604	560,807	0	0	0	0	0	
July 1, 2040	0	500,948	589,469	0	0	0	0	0	
July 1, 2041	0	520,736	628,262	0	0	0	0	0	
July 1, 2042	0	540,132	669,844	0	0	0	0	0	
July 1, 2043	0	539,800	694,512	0	0	0	0	0	
July 1, 2044	0	542,293	719,481	0	0	0	0	0	
July 1, 2045	0	533,589	735,409	0	0	0	0	0	
July 1, 2046	0	536,869	765,910	0	0	0	0	0	
July 1, 2047	0	523,943	779,406	0	0	0	0	0	
July 1, 2048	0	533,833	818,925	0	0	0	0	0	
July 1, 2049	0	542,332	861,420	0	0	0	0	0	
July 1, 2050	0	545,345	900,563	0	0	0	0	0	
July 1, 2051	0	529,279	925,098	0	0	0	0	0	
July 1, 2052	0	535,368	974,331	0	0	0	0	0	
July 1, 2053	0	539,677	1,024,219	0	0	0	0	0	
July 1, 2054	0	519,609	1,050,915	0	0	0	0	0	
July 1, 2055	0	519,424	1,099,691	0	0	0	0	0	
July 1, 2056	0	499,729	1,131,872	0	0	0	0	0	

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2017 Valuation Date (Continued)									
For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Portion of Employer Contributions for Current Plan Members	III. Total Benefit Payments	IV. Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Investment Earnings	VIII. Ending Fiduciary Net Position for Current Plan Members	
	July 1, 2057	0	484,670	1,171,003	0	0	0	0	0
July 1, 2058	0	475,099	1,219,214	0	0	0	0	0	
July 1, 2059	0	451,334	1,257,586	0	0	0	0	0	
July 1, 2060	0	433,263	1,304,229	0	0	0	0	0	
July 1, 2061	0	419,914	1,360,781	0	0	0	0	0	
July 1, 2062	0	407,608	1,422,733	0	0	0	0	0	
July 1, 2063	0	392,141	1,485,293	0	0	0	0	0	
July 1, 2064	0	378,328	1,553,346	0	0	0	0	0	
July 1, 2065	0	364,370	1,625,450	0	0	0	0	0	
July 1, 2066	0	348,131	1,699,506	0	0	0	0	0	
July 1, 2067	0	334,166	1,779,767	0	0	0	0	0	
July 1, 2068	0	322,618	1,867,200	0	0	0	0	0	
July 1, 2069	0	311,789	1,960,066	0	0	0	0	0	
July 1, 2070	0	300,881	2,057,453	0	0	0	0	0	
July 1, 2071	0	289,518	2,160,428	0	0	0	0	0	
July 1, 2072	0	277,695	2,268,041	0	0	0	0	0	
July 1, 2073	0	265,308	2,380,337	0	0	0	0	0	
July 1, 2074	0	252,415	2,498,333	0	0	0	0	0	
July 1, 2075	0	238,991	2,621,493	0	0	0	0	0	
July 1, 2076	0	225,155	2,750,409	0	0	0	0	0	
July 1, 2077	0	211,174	2,885,281	0	0	0	0	0	
July 1, 2078	0	197,230	3,027,071	0	0	0	0	0	
July 1, 2079	0	183,407	3,176,161	0	0	0	0	0	
July 1, 2080	0	169,727	3,332,469	0	0	0	0	0	
July 1, 2081	0	156,315	3,497,505	0	0	0	0	0	
July 1, 2082	0	143,052	3,671,073	0	0	0	0	0	
July 1, 2083	0	130,147	3,854,043	0	0	0	0	0	
July 1, 2084	0	117,483	4,046,941	0	0	0	0	0	
July 1, 2085	0	105,447	4,250,246	0	0	0	0	0	
July 1, 2086	0	93,670	4,464,389	0	0	0	0	0	
July 1, 2087	0	82,491	4,690,190	0	0	0	0	0	
July 1, 2088	0	71,874	4,928,453	0	0	0	0	0	
July 1, 2089	0	61,960	5,179,607	0	0	0	0	0	
July 1, 2090	0	52,952	5,445,006	0	0	0	0	0	
July 1, 2091	0	44,757	5,725,214	0	0	0	0	0	
July 1, 2092	0	37,465	6,020,986	0	0	0	0	0	
July 1, 2093	0	31,005	6,333,130	0	0	0	0	0	
July 1, 2094	0	25,419	6,662,471	0	0	0	0	0	
July 1, 2095	0	20,582	7,009,720	0	0	0	0	0	

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**20. PLAN PROJECTION DISCLOSURES (CONTINUED)**

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

For the Period Ending on the Measurement Date	Beginning Fiduciary Net Position for Current Plan		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 Equivalent Discount Rate
	Members	Benefit Payments					
July 1, 2017	0	354,621	0	354,621	0	354,621	354,621
July 1, 2018	0	191,174	0	191,174	0	185,376	185,376
July 1, 2019	0	203,631	0	203,631	0	191,466	191,466
July 1, 2020	0	211,302	0	211,302	0	192,652	192,652
July 1, 2021	0	212,013	0	212,013	0	187,438	187,438
July 1, 2022	0	232,368	0	232,368	0	199,202	199,202
July 1, 2023	0	245,648	0	245,648	0	204,200	204,200
July 1, 2024	0	269,347	0	269,347	0	217,109	217,109
July 1, 2025	0	284,467	0	284,467	0	222,342	222,342
July 1, 2026	0	315,862	0	315,862	0	239,392	239,392
July 1, 2027	0	341,074	0	341,074	0	250,660	250,660
July 1, 2028	0	378,100	0	378,100	0	269,443	269,443
July 1, 2029	0	396,059	0	396,059	0	273,680	273,680
July 1, 2030	0	412,547	0	412,547	0	276,427	276,427
July 1, 2031	0	426,738	0	426,738	0	277,263	277,263
July 1, 2032	0	435,375	0	435,375	0	274,295	274,295
July 1, 2033	0	450,433	0	450,433	0	275,175	275,175
July 1, 2034	0	425,097	0	425,097	0	251,820	251,820
July 1, 2035	0	423,545	0	423,545	0	243,290	243,290
July 1, 2036	0	441,619	0	441,619	0	245,978	245,978
July 1, 2037	0	455,782	0	455,782	0	246,167	246,167
July 1, 2038	0	466,806	0	466,806	0	244,474	244,474
July 1, 2039	0	487,604	0	487,604	0	247,621	247,621
July 1, 2040	0	500,948	0	500,948	0	246,681	246,681
July 1, 2041	0	520,736	0	520,736	0	248,648	248,648
July 1, 2042	0	540,132	0	540,132	0	250,087	250,087
July 1, 2043	0	539,800	0	539,800	0	242,353	242,353
July 1, 2044	0	542,293	0	542,293	0	236,087	236,087
July 1, 2045	0	533,589	0	533,589	0	225,252	225,252
July 1, 2046	0	536,869	0	536,869	0	219,763	219,763
July 1, 2047	0	523,943	0	523,943	0	207,966	207,966
July 1, 2048	0	533,833	0	533,833	0	205,465	205,465
July 1, 2049	0	542,332	0	542,332	0	202,405	202,405
July 1, 2050	0	545,345	0	545,345	0	197,357	197,357
July 1, 2051	0	529,279	0	529,279	0	185,733	185,733
July 1, 2052	0	535,368	0	535,368	0	182,171	182,171
July 1, 2053	0	539,677	0	539,677	0	178,068	178,068
July 1, 2054	0	519,609	0	519,609	0	166,246	166,246
July 1, 2055	0	519,424	0	519,424	0	161,146	161,146
July 1, 2056	0	499,729	0	499,729	0	150,334	150,334

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**20. PLAN PROJECTION DISCLOSURES (CONTINUED)**

Actuarial Present Values of Projected Benefit Payments using a July 1, 2017 Valuation Date (Continued)							
For the Period Ending on the Measurement Date	Beginning	Funded Portion		Unfunded	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Equivalent Discount Rate
	Fiduciary Net Position for Current Plan Members	Benefit Payments	of Benefit Payments	Portion of Benefit Payments			
July 1, 2057	0	484,670	0	484,670	0	141,381	141,381
July 1, 2058	0	475,099	0	475,099	0	134,386	134,386
July 1, 2059	0	451,334	0	451,334	0	123,792	123,792
July 1, 2060	0	433,263	0	433,263	0	115,231	115,231
July 1, 2061	0	419,914	0	419,914	0	108,293	108,293
July 1, 2062	0	407,608	0	407,608	0	101,931	101,931
July 1, 2063	0	392,141	0	392,141	0	95,089	95,089
July 1, 2064	0	378,328	0	378,328	0	88,957	88,957
July 1, 2065	0	364,370	0	364,370	0	83,076	83,076
July 1, 2066	0	348,131	0	348,131	0	76,966	76,966
July 1, 2067	0	334,166	0	334,166	0	71,638	71,638
July 1, 2068	0	322,618	0	322,618	0	67,065	67,065
July 1, 2069	0	311,789	0	311,789	0	62,848	62,848
July 1, 2070	0	300,881	0	300,881	0	58,810	58,810
July 1, 2071	0	289,518	0	289,518	0	54,872	54,872
July 1, 2072	0	277,695	0	277,695	0	51,035	51,035
July 1, 2073	0	265,308	0	265,308	0	47,280	47,280
July 1, 2074	0	252,415	0	252,415	0	43,618	43,618
July 1, 2075	0	238,991	0	238,991	0	40,045	40,045
July 1, 2076	0	225,155	0	225,155	0	36,583	36,583
July 1, 2077	0	211,174	0	211,174	0	33,270	33,270
July 1, 2078	0	197,230	0	197,230	0	30,131	30,131
July 1, 2079	0	183,407	0	183,407	0	27,169	27,169
July 1, 2080	0	169,727	0	169,727	0	24,380	24,380
July 1, 2081	0	156,315	0	156,315	0	21,773	21,773
July 1, 2082	0	143,052	0	143,052	0	19,321	19,321
July 1, 2083	0	130,147	0	130,147	0	17,045	17,045
July 1, 2084	0	117,483	0	117,483	0	14,920	14,920
July 1, 2085	0	105,447	0	105,447	0	12,985	12,985
July 1, 2086	0	93,670	0	93,670	0	11,185	11,185
July 1, 2087	0	82,491	0	82,491	0	9,551	9,551
July 1, 2088	0	71,874	0	71,874	0	8,070	8,070
July 1, 2089	0	61,960	0	61,960	0	6,745	6,745
July 1, 2090	0	52,952	0	52,952	0	5,590	5,590
July 1, 2091	0	44,757	0	44,757	0	4,582	4,582
July 1, 2092	0	37,465	0	37,465	0	3,719	3,719
July 1, 2093	0	31,005	0	31,005	0	2,984	2,984
July 1, 2094	0	25,419	0	25,419	0	2,372	2,372
July 1, 2095	0	20,582	0	20,582	0	1,863	1,863

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 2017 Measurement Date)  
(continued)

**21. CHANGES TO NET OPEB EXPENSE**

Fiscal Year	Differences between actual & expected experience		Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of differences between expected & actual experience					
	Recognition Period (years)	Recognition Period (years)	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	556,505	5.37	103,632	103,632	103,632	103,632	103,632	38,345
2019								
Net increase (decrease) in OPEB expense			103,632	103,632	103,632	103,632	103,632	38,345

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 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>
	<u>Actuarial Assumptions</u>	<u>Recognition Period (years)</u>						
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	0	5.37	0	0	0	0	0	0
2019								
Net increase (decrease) in OPEB expense			0	0	0	0	0	0

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURE  
(As of the July 1, 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</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>between actual &amp; expected earnings</b>	<b>Recognition Period (years)</b>							
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018	0	5.00	0	0	0	0	0	0	0
2019									
Net increase (decrease) in OPEB expense			0	0	0	0	0	0	0



EXHIBIT A

REQUIRED SUPPLEMENTARY INFORMATION

(As of the July 1, 2017 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of July 1, 2017.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, July 1, 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 July 1, 2017 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
Single Equivalent Discount Rate:	3.25%, net of OPEB plan investment expense, including inflation.
Inflation:	2.75% as of July 1, 2017 and for future periods
Salary Increases:	3.00% annually as of July 1, 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

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the July 1, 2017 Measurement Date)  
(continued)

Notes to Required Supplementary Information (Continued):

Disabled Mortality: RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females

Plan Membership

Plan Membership: At July 1, 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 July 1, 2017

- Discount rate is 3.25% 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 July 1, 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	556,505	0	103,632	452,873	0
<b>Total</b>				<b>452,873</b>	<b>0</b>

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the July 1, 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>				0	0

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the July 1, 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	0	0	0	0
<b>Total</b>				0	0

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the July 1, 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	452,873	0
II. Changes of assumptions	0	0
III. Net difference between projected & actual earnings on OPEB plan investments	<u>0</u>	<u>0</u>
IV. Total [I.+II.+III.]	452,873	0
<b>Year ended June 30:</b>		
	2019	103,632
	2020	103,632
	2021	103,632
	2022	103,632
	2023	38,345
	Thereafter	0

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the July 1, 2017 Measurement Date)  
(continued)

Notes to Required Supplementary Information (Continued):Contributions:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town contributed \$0 beyond the pay-as-you-go cost for the period ending on the July 1, 2017 Measurement Date. For the year ending on the July 1, 2017 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$354,621 .

EXHIBIT C

PLAN DEMOGRAPHICS

(As of the July 1, 2017 Valuation Date)

**ACTIVE EMPLOYEES**

Valuation Date	<u>July 1, 2017</u>	<u>July 1, 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>July 1, 2017</u>	<u>July 1, 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)

**Total Medical, Dental & Life Insurance - Pay-as-you-go Funding - 3.25% discount rate**

For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 7.05% return		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.]
			III. Net OPEB Liability (Asset) [I. - II.]						
2018	July 1, 2017	7,754,655	0	7,754,655	0.00%	232,636	354,621	0	354,621
2019	July 1, 2018	8,098,536	0	8,098,536	0.00%	267,070	180,976	0	180,976
2020	July 1, 2019	8,442,232	0	8,442,232	0.00%	278,361	203,631	0	203,631
2021	July 1, 2020	8,867,307	0	8,867,307	0.00%	291,967	211,302	0	211,302
2022	July 1, 2021	9,283,730	0	9,283,730	0.00%	306,015	209,787	0	209,787
2023	July 1, 2022	9,704,526	0	9,704,526	0.00%	323,392	232,368	0	232,368
2024	July 1, 2023	10,142,182	0	10,142,182	0.00%	339,923	245,648	0	245,648
2025	July 1, 2024	10,576,084	0	10,576,084	0.00%	351,095	269,347	0	269,347
2026	July 1, 2025	11,033,586	0	11,033,586	0.00%	375,013	284,467	0	284,467
2027	July 1, 2026	11,487,758	0	11,487,758	0.00%	395,865	315,862	0	315,862
2028	July 1, 2027	11,946,459	0	11,946,459	0.00%	414,948	341,074	0	341,074
2029	July 1, 2028	12,397,835	0	12,397,835	0.00%	439,659	378,100	0	378,100
2030	July 1, 2029	12,861,488	0	12,861,488	0.00%	459,541	397,844	0	397,844
2031	July 1, 2030	13,341,357	0	13,341,357	0.00%	482,594	417,183	0	417,183
2032	July 1, 2031	13,833,351	0	13,833,351	0.00%	502,879	435,525	0	435,525
2033	July 1, 2032	14,354,624	0	14,354,624	0.00%	526,753	449,850	0	449,850
2034	July 1, 2033	14,871,885	0	14,871,885	0.00%	552,273	471,879	0	471,879
2035	July 1, 2034	15,470,465	0	15,470,465	0.00%	574,678	452,621	0	452,621
2036	July 1, 2035	16,042,117	0	16,042,117	0.00%	603,794	458,420	0	458,420
2037	July 1, 2036	16,680,926	0	16,680,926	0.00%	629,311	484,776	0	484,776
2038	July 1, 2037	17,379,735	0	17,379,735	0.00%	659,049	507,134	0	507,134
2039	July 1, 2038	18,085,187	0	18,085,187	0.00%	689,305	527,623	0	527,623
2040	July 1, 2039	18,831,621	0	18,831,621	0.00%	719,260	560,807	0	560,807
2041	July 1, 2040	19,604,767	0	19,604,767	0.00%	753,080	589,469	0	589,469
2042	July 1, 2041	20,367,916	0	20,367,916	0.00%	792,684	628,262	0	628,262
2043	July 1, 2042	21,146,513	0	21,146,513	0.00%	831,169	669,844	0	669,844
2044	July 1, 2043	21,992,890	0	21,992,890	0.00%	872,830	694,512	0	694,512
2045	July 1, 2044	22,858,427	0	22,858,427	0.00%	916,760	719,481	0	719,481
2046	July 1, 2045	23,812,484	0	23,812,484	0.00%	964,000	735,409	0	735,409
2047	July 1, 2046	24,813,694	0	24,813,694	0.00%	1,012,373	765,910	0	765,910
2048	July 1, 2047	25,889,457	0	25,889,457	0.00%	1,064,293	779,406	0	779,406
2049	July 1, 2048	27,016,775	0	27,016,775	0.00%	1,117,674	818,925	0	818,925

EXHIBIT D

PROJECTED CASH FLOWS (OPEN GROUP)

**Total Medical, Dental & Life Insurance - 6.75% discount rate increasing at 0.00% per year**

For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net		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	III. Net OPEB Liability (Asset) ["NOL"] [I. - II.]					
2018	July 1, 2017	4,568,972	0	4,568,972	0.00%	94,786	354,621	75,000	429,621
2019	July 1, 2018	4,801,372	77,599	4,723,773	1.62%	108,816	180,976	100,000	280,976
2020	July 1, 2019	5,029,912	186,535	4,843,377	3.71%	113,600	203,631	125,000	328,631
2021	July 1, 2020	5,272,015	329,017	4,942,998	6.24%	119,437	211,302	125,000	336,302
2022	July 1, 2021	5,539,004	481,544	5,057,460	8.69%	125,462	209,787	125,000	334,787
2023	July 1, 2022	5,807,381	644,824	5,162,557	11.10%	132,887	232,368	125,000	357,368
2024	July 1, 2023	6,087,218	819,615	5,267,603	13.46%	139,994	245,648	125,000	370,648
2025	July 1, 2024	6,363,788	1,006,729	5,357,059	15.82%	144,434	269,347	125,000	394,347
2026	July 1, 2025	6,654,823	1,207,035	5,447,788	18.14%	154,678	284,467	125,000	409,467
2027	July 1, 2026	6,940,621	1,421,462	5,519,159	20.48%	163,695	315,862	125,000	440,862
2028	July 1, 2027	7,226,580	1,651,006	5,575,574	22.85%	171,291	341,074	125,000	466,074
2029	July 1, 2028	7,502,376	1,896,733	5,605,643	25.28%	181,724	378,100	125,000	503,100
2030	July 1, 2029	7,784,045	2,159,784	5,624,261	27.75%	189,847	397,844	125,000	522,844
2031	July 1, 2030	8,073,937	2,441,380	5,632,557	30.24%	199,405	417,183	125,000	542,183
2032	July 1, 2031	8,370,760	2,742,829	5,627,931	32.77%	207,716	435,525	125,000	560,525
2033	July 1, 2032	8,684,389	3,065,530	5,618,859	35.30%	217,554	449,850	125,000	574,850
2034	July 1, 2033	8,996,329	3,410,981	5,585,348	37.92%	228,078	471,879	125,000	596,879
2035	July 1, 2034	9,365,387	3,780,786	5,584,601	40.37%	237,300	452,621	125,000	577,621
2036	July 1, 2035	9,722,167	4,176,663	5,545,504	42.96%	249,341	458,420	125,000	583,420
2037	July 1, 2036	10,115,628	4,600,449	5,515,179	45.48%	259,792	484,776	125,000	609,776
2038	July 1, 2037	10,544,496	5,054,112	5,490,384	47.93%	271,984	507,134	125,000	632,134
2039	July 1, 2038	10,977,604	5,539,758	5,437,846	50.46%	284,377	527,623	125,000	652,623
2040	July 1, 2039	11,432,910	6,059,642	5,373,268	53.00%	296,585	560,807	125,000	685,807
2041	July 1, 2040	11,902,748	6,616,178	5,286,570	55.59%	310,457	589,469	125,000	714,469
2042	July 1, 2041	12,363,772	7,211,950	5,151,822	58.33%	326,735	628,262	125,000	753,262
2043	July 1, 2042	12,829,009	7,849,724	4,979,285	61.19%	342,523	669,844	125,000	794,844
2044	July 1, 2043	13,331,248	8,532,461	4,798,787	64.00%	359,587	694,512	125,000	819,512
2045	July 1, 2044	13,845,809	9,263,331	4,582,478	66.90%	377,584	719,481	125,000	844,481
2046	July 1, 2045	14,412,709	10,045,727	4,366,982	69.70%	396,923	735,409	125,000	860,409
2047	July 1, 2046	15,006,021	10,883,282	4,122,739	72.53%	416,667	765,910	125,000	890,910
2048	July 1, 2047	15,649,765	11,779,885	3,869,880	75.27%	437,877	779,406	125,000	904,406
2049	July 1, 2048	16,321,365	12,739,698	3,581,667	78.06%	459,746	818,925	125,000	943,925

EXHIBIT D

PROJECTED CASH FLOWS (OPEN GROUP)

**Total Medical & Life Insurance - Pay-as-you-go 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"
July 1, 2017	39	7,754,655	7,754,655	354,621	354,621
July 1, 2018	40	8,098,536	7,862,656	180,976	175,705
July 1, 2019	41	8,442,232	7,957,613	203,631	191,942
July 1, 2020	43	8,867,307	8,114,842	211,302	193,371
July 1, 2021	45	9,283,730	8,248,474	209,787	186,393
July 1, 2022	46	9,704,526	8,371,209	232,368	200,443
July 1, 2023	47	10,142,182	8,493,918	245,648	205,726
July 1, 2024	49	10,576,084	8,599,324	269,347	219,004
July 1, 2025	50	11,033,586	8,710,015	284,467	224,561
July 1, 2026	52	11,487,758	8,804,410	315,862	242,082
July 1, 2027	54	11,946,459	8,889,287	341,074	253,791
July 1, 2028	55	12,397,835	8,956,460	378,100	273,147
July 1, 2029	57	12,861,488	9,020,789	397,844	279,040
July 1, 2030	57	13,341,357	9,084,815	417,183	284,081
July 1, 2031	58	13,833,351	9,145,475	435,525	287,933
July 1, 2032	59	14,354,624	9,213,687	449,850	288,742
July 1, 2033	59	14,871,885	9,267,667	471,879	294,059
July 1, 2034	59	15,470,465	9,359,886	452,621	273,843
July 1, 2035	59	16,042,117	9,423,053	458,420	269,273
July 1, 2036	58	16,680,926	9,512,899	484,776	276,461
July 1, 2037	58	17,379,735	9,622,738	507,134	280,788
July 1, 2038	58	18,085,187	9,721,679	527,623	283,623
July 1, 2039	58	18,831,621	9,828,082	560,807	292,681
July 1, 2040	58	19,604,767	9,933,574	589,469	298,679
July 1, 2041	58	20,367,916	10,019,665	628,262	309,063
July 1, 2042	59	21,146,513	10,099,692	669,844	319,921
July 1, 2043	59	21,992,890	10,197,987	694,512	322,042
July 1, 2044	59	22,858,427	10,290,614	719,481	323,902
July 1, 2045	59	23,812,484	10,407,883	735,409	321,430
July 1, 2046	59	24,813,694	10,529,601	765,910	325,011
July 1, 2047	59	25,889,457	10,666,113	779,406	321,105
July 1, 2048	59	27,016,775	10,806,363	818,925	327,559
July 1, 2049	59	28,186,113	10,945,712	861,420	334,521
July 1, 2050	58	29,413,489	11,089,657	900,563	339,536
July 1, 2051	58	30,722,401	11,245,778	925,098	338,627
July 1, 2052	58	32,088,142	11,403,593	974,331	346,261
July 1, 2053	58	33,514,238	11,563,499	1,024,219	353,389
July 1, 2054	58	35,040,461	11,737,957	1,050,915	352,039
July 1, 2055	57	36,756,579	11,954,201	1,099,691	357,648
July 1, 2056	57	38,472,640	12,147,873	1,131,872	357,393

## EXHIBIT E

### GLOSSARY

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

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

**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 E**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 earning 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.