

**Town of Norton 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 31, 2018

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October 31, 2018

*Personal and Confidential*

Ms. Catherine VanDyne  
Treasurer / Collector  
Town of Norton  
70 E. Main Street  
Norton, MA 02766

Dear Ms. VanDyne:

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

A handwritten signature in black ink, appearing to read 'P. Elmore', is written over a light gray horizontal line.

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

**October 31, 2018**ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Norton 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 16 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 \$3,558,805 or 5.64% of the beginning Total OPEB Liability ("TOL"). This was mainly due to premiums increasing more than the expected 10% increase as well as more employees retiring than expected. The experience loss on TOL and the experience gain on assets are amortized into the net OPEB expense over time until fully recognized.

Over the two year period, the TOL went from \$59,970,409 as of July 1, 2015 to \$69,594,916 as of July 1, 2017 for an increase of \$9,624,507. The Net OPEB Expense was \$3,444,646 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)

### Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare Integrated) plans - represent 77% 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 (3.50%) – 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

### 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, 2015</u></b>
I. Actuarial Accrued Liability	69,594,916	59,970,409
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>63,576,946</u>	<u>N/A</u>
III. Liability from Implicit Subsidy [I. - II.]	6,017,970	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, 2015</u></b>
IV. Employer Payments (Including Implicit Subsidy)	1,759,835	1,764,976
V. Actual Employer Payments	<u>N/A</u>	<u>N/A</u>
VI. Implicit Subsidy [IV. - V.]	<u>N/A</u>	<u>N/A</u>

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, 2015</b>
<b>Measurement Date &amp; Period Ending</b>	<b>July 1, 2017</b>	<b>July 1, 2015</b>
<b>Reporting Date/Fiscal Year End</b>	<b>June 30, 2018</b>	<b>June 30, 2016</b>
Total OPEB Liability	69,594,916	59,970,409
Per Eligible Active Plan Participant	73,037	66,564
Per Retiree/Spouse Plan Participant	90,045	75,862
Total Annual Service Cost (annual benefit accrual)	2,387,415	2,213,666
Per Eligible Active Plan Participant	5,426	4,720
Expected Employer Share of Retiree Costs	1,759,835	1,764,976
Per Retiree/Spouse Plan Participant	4,230	4,657
Net OPEB Liability as a % of Payroll	235.70%	255.80%
Average Annual Medical Plan Premium (Single Coverage)	5,917	5,568
Average Annual Medical Plan Premium (Family Coverage)	23,448	21,977
<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	416	69,594,916	1,759,835
July 1, 2022	422	72,984,167	2,068,777
July 1, 2027	438	76,775,619	2,270,707
July 1, 2032	457	80,477,064	2,615,103
July 1, 2037	461	84,343,655	2,725,632
July 1, 2042	458	89,791,772	2,855,528
July 1, 2047	457	96,694,483	3,017,268

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

**We have an "unfunded liability". How do we fund it? Can we fund it?**

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

	Current Funding Policy	Alternative Funding Policy - Level Dollar	Alternative Funding Policy - Increasing 3.00% per Year
<b>Net OPEB Liability</b>	\$69,303,304	\$41,997,795	\$41,997,795
<b>Trust Contribution made during Fiscal Year 2019</b>	\$90,000	\$1,675,566	\$1,369,599
<b>Discount Rate*</b>	3.50%	7.00%	7.00%

\*Final discount rate will be chosen based on liabilities and cash flows at each measurement date

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

**Town of Norton**  
**Assuming Funding - 3.50% discount rate**  
**Comparison of Plan Liabilities to Prior Valuation**

Valuation Date	July 1, 2017	July 1, 2015
For the Measurement Period ending on the Measurement Date of:	July 1, 2017	July 1, 2015
For the Reporting Period & Fiscal Year ending on:	June 30, 2018	June 30, 2016
I. Present Value of Future Benefits		
A. Actives	58,270,984	59,677,046
B. Retirees/Disabled	37,458,622	28,751,707
C. Total	95,729,606	88,428,753
II. Present Value of Future Normal Cost	26,134,690	28,458,344
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	32,136,294	31,218,702
B. Retirees/Disabled	37,458,622	28,751,707
C. Total	69,594,916	59,970,409
IV. Fiduciary Net Position [Plan Assets]	291,612	111,437
V. Net OPEB Liability (Asset) [III. - IV.]	69,303,304	59,858,972
VI. Funded Ratio [IV. / III.]	0.42%	0.19%
VII. Annual Covered Payroll	29,407,526	23,397,443
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	235.7%	255.8%
IX. Number of Eligible Participants		
A. Actives	440	469
B. Retirees/Disabled	416	379
C. Total	856	848
X. Service Cost	2,387,415	2,213,666
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	2,263,117	N/A
XII. Projected Earnings on OPEB Plan Investments	(15,662)	N/A
XIII. Net Recognition of Deferred (Inflows)/Outflows	649,611	N/A
XIV. Financial Statement Expense [X.+XI.+XII.+XIII.]	5,284,481	N/A
XV. Employer Share of Costs	(1,759,835)	(1,764,976)
XVI. Employer (Payments)/Withdrawals to/from OPEB Trust	(80,000)	(70,000)
XVII. Total Employer Contribution [XV. + XVI.]	(1,839,835)	(1,834,976)
XVIII. Other Changes	0	N/A
XIX. Net OPEB Expense [XIV.+XVII.+XVIII.]	3,444,646	N/A
XX. Discount Rate	3.50%	3.50%

## SECTION I

### PRINCIPAL RESULTS OF THE VALUATION

(continued)

#### Town of Norton

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

**Assuming Funding - 3.50% 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	57,551,791	0	86,373	632,820	58,270,984
B. Retirees/Disabled	<u>37,173,928</u>	<u>0</u>	<u>183,184</u>	<u>101,510</u>	<u>37,458,622</u>
C. Total	94,725,719	0	269,557	734,330	95,729,606
II. Present Value of Future Normal Cost	25,714,743	0	29,906	390,041	26,134,690
III. Total OPEB Liability					
A. Actives	31,837,048	0	56,467	242,779	32,136,294
B. Retirees/Disabled	<u>37,173,928</u>	<u>0</u>	<u>183,184</u>	<u>101,510</u>	<u>37,458,622</u>
C. Total	69,010,976	0	239,651	344,289	69,594,916
IV. Fiduciary Net Position [Plan Assets]	289,165	0	1,004	1,443	291,612
V. Net OPEB Liability (Asset) [III. - IV.]	68,721,811	0	238,647	342,846	69,303,304
VI. Annual Covered Payroll	29,407,526	29,407,526	29,407,526	29,407,526	29,407,526
VII. Net OPEB Liability (Asset) as % of Covered Payroll	233.7%	0.0%	0.8%	1.2%	235.7%
VIII. Number of Eligible Participants					
IX. A. Actives	440	0	440	440	
B. Retirees/Disabled	<u>416</u>	<u>0</u>	<u>194</u>	<u>416</u>	
C. Total	856	0	634	856	
<b>For the Reporting Date and Fiscal Year Ending June 30, 2018</b>					
X. Service Cost	2,350,532	0	3,251	33,632	2,387,415
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	2,241,519	0	8,372	13,226	2,263,117
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	645,146	0	2,240	3,218	650,604
XIV. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0
XV. Projected Earnings on OPEB Plan Investments	(15,531)	0	(54)	(77)	(15,662)
XVI. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	(985)	<u>0</u>	(3)	(5)	(993)
XVII. Financial Statement Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.]	5,220,681	0	13,806	49,994	5,284,481
XVIII. Employer Share of Costs	(1,753,491)	0	(6,344)	0	(1,759,835)
XIX. Employer (Payments)/Withdrawals to/from OPEB Trust	(79,331)	0	(272)	(397)	(80,000)
XX. Total Employer Contribution [XVIII. + XIX.]	(1,832,822)	0	(6,616)	(397)	(1,839,835)
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.]	3,387,859	0	7,190	49,597	3,444,646

## SECTION I

### PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Norton

Plan Liabilities as of the July 1, 2017 Measurement Date

Assuming Funding - 3.50% discount rate

	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	41,360,080	7,758,933	7,242,224	378,352	1,531,395	58,270,984
B. Retirees/Disabled	36,017,897	918,099	0	0	522,626	37,458,622
C. Total	77,377,977	8,677,032	7,242,224	378,352	2,054,021	95,729,606
II. Present Value of Future Normal Cost	18,376,678	3,402,920	3,673,834	174,607	506,651	26,134,690
III. Total OPEB Liability						
A. Actives	22,983,402	4,356,013	3,568,390	203,745	1,024,744	32,136,294
B. Retirees/Disabled	36,017,897	918,099	0	0	522,626	37,458,622
C. Total	59,001,299	5,274,112	3,568,390	203,745	1,547,370	69,594,916
IV. Fiduciary Net Position [Plan Assets]	247,195	22,102	14,950	859	6,506	291,612
V. Net OPEB Liability (Asset) [III. - IV.]	58,754,104	5,252,010	3,553,440	202,886	1,540,864	69,303,304
VI. Annual Covered Payroll	23,796,486	2,547,663	2,340,757	183,394	539,226	29,407,526
VII. Net OPEB Liability (Asset) as % of Covered Payroll	246.9%	206.2%	151.8%	110.6%	285.8%	235.7%
VIII. Number of Eligible Participants						
A. Actives	359	33	36	3	9	440
B. Retirees/Disabled	411	2	0	0	3	416
C. Total	770	35	36	3	12	856
<b>For the Reporting Date and Fiscal Year Ending June 30, 2018</b>						
IX. Service Cost	1,769,223	260,758	296,389	22,432	38,613	2,387,415
X. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	1,907,193	175,898	122,745	7,175	50,106	2,263,117
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	551,570	49,305	33,359	1,905	14,465	650,604
XIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0	0
XIV. Projected Earnings on OPEB Plan Investments	(13,263)	(1,192)	(810)	(47)	(350)	(15,662)
XV. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	(842)	(75)	(51)	(3)	(22)	(993)
XVI. Financial Statement Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.]	4,213,881	484,694	451,632	31,462	102,812	5,284,481
XVII. Employer Share of Costs	(1,700,525)	(24,322)	(7,386)	(274)	(27,328)	(1,759,835)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(67,277)	(6,291)	(4,396)	(257)	(1,779)	(80,000)
XIX. Total Employer Contribution [XVII. + XVIII.]	(1,767,802)	(30,613)	(11,782)	(531)	(29,107)	(1,839,835)
XX. Other Changes	0	0	0	0	0	0
XXI. Net OPEB Expense [XVI.+XIX.+XX.]	2,446,079	454,081	439,850	30,931	73,705	3,444,646

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Norton**  
**Assuming Funding - 3.50% 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	10,842,048	6,360,558	433,337
B. Spouses	<u>7,380,178</u>	<u>4,418,164</u>	<u>285,043</u>
C. Total	18,222,226	10,778,722	718,380
Age 65 and Over			
A. Participants	24,833,016	12,494,520	989,238
B. Spouses	<u>15,215,742</u>	<u>8,863,052</u>	<u>679,797</u>
C. Total	40,048,758	21,357,572	1,669,035
Actives Total			
A. Participants	35,675,064	18,855,078	1,422,575
B. Spouses	<u>22,595,920</u>	<u>13,281,216</u>	<u>964,840</u>
C. Total	58,270,984	32,136,294	2,387,415
<b>Retirees/Disabled</b>			
Under Age 65			
A. Participants	3,273,118	3,273,118	0
B. Spouses	<u>1,913,651</u>	<u>1,913,651</u>	<u>0</u>
C. Total	5,186,769	5,186,769	0
Age 65 and Over			
A. Participants	29,844,661	29,844,661	0
B. Spouses	<u>2,427,192</u>	<u>2,427,192</u>	<u>0</u>
C. Total	32,271,853	32,271,853	0
Retirees/Disabled Total			
A. Participants	33,117,779	33,117,779	0
B. Spouses	<u>4,340,843</u>	<u>4,340,843</u>	<u>0</u>
C. Total	37,458,622	37,458,622	0
<b>Total Population</b>			
A. Participants	68,792,843	51,972,857	1,422,575
B. Spouses	<u>26,936,763</u>	<u>17,622,059</u>	<u>964,840</u>
C. Total	95,729,606	69,594,916	2,387,415

## 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, 2007 GASB 74 is adopted for the fiscal year ending June 30, 2017 GASB 75 is adopted for the fiscal year ending June 30, 2018
<u>Plan Year</u>	July 1 through June 30.
<u>Eligibility</u>	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Participant Contributions</u>	Retirees pay 25%-30% of premiums for Medical Insurance, 25% of premiums for Life Insurance, and 100% of premiums for Dental Coverage.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Blue Cross Blue Shield of Massachusetts as well as Group Term Life Insurance. Retirees can purchase Dental Insurance via DMS or Altus Dental by paying 100% of the premiums.
<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 (5.47 years for the Town for the 2018 fiscal year).

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

##### B. ASSET VALUATION METHOD

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

### SECTION III

#### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

#### C. ACTUARIAL ASSUMPTIONS

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

##### Pre-Retirement Mortality

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

##### Post-Retirement Mortality

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

##### Disabled Mortality

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

##### Mortality Experience Study

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

##### Discount Rate

3.50% per annum (previously 3.50%)

##### Long Term Rate of Return

6.80% (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>Standard Male</u>	<u>Standard Female</u>	<u>Male Teachers</u>	<u>Female Teachers</u>	<u>Public Safety</u>
45	0.00%	0.00%	0.00%	0.00%	1.00%
46	0.00%	0.00%	0.00%	0.00%	1.00%
47	0.00%	0.00%	0.00%	0.00%	1.00%
48	0.00%	0.00%	0.00%	0.00%	1.00%
49	0.00%	0.00%	0.00%	0.00%	1.00%
50	1.00%	1.50%	2.00%	1.50%	2.00%
51	1.00%	1.50%	2.00%	1.50%	2.00%
52	1.00%	2.50%	2.00%	1.50%	2.00%
53	1.00%	2.50%	2.00%	1.50%	5.00%
54	2.00%	2.50%	2.00%	2.00%	7.50%
55	2.00%	5.50%	6.00%	5.00%	15.00%
56	2.50%	6.50%	20.00%	15.00%	10.00%
57	2.50%	6.50%	40.00%	35.00%	10.00%
58	5.00%	6.50%	50.00%	35.00%	10.00%
59	6.50%	6.50%	50.00%	35.00%	15.00%
60	12.00%	5.00%	40.00%	35.00%	20.00%
61	20.00%	13.00%	40.00%	35.00%	20.00%
62	30.00%	15.00%	35.00%	35.00%	25.00%
63	25.00%	12.50%	35.00%	35.00%	25.00%
64	22.00%	18.00%	35.00%	35.00%	30.00%
65	40.00%	15.00%	35.00%	35.00%	100.00%
66	25.00%	20.00%	40.00%	35.00%	100.00%
67	25.00%	20.00%	40.00%	30.00%	100.00%
68	30.00%	25.00%	40.00%	30.00%	100.00%
69	30.00%	20.00%	40.00%	30.00%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%	100.00%	100.00%

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

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD  
AND ACTUARIAL ASSUMPTIONS

(continued)

Disability rates

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

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

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD  
AND ACTUARIAL ASSUMPTIONS  
(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Healthcare Trend

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

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

Participation Rate

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

Percent Married

It was assumed that 80% of male 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
HMO	136		263	399
PPO	13		6	19
Managed Blue	90			90
Medex	220			220
<b>Total</b>	459	0	269	728

	Per Contract Costs (monthly) - FY 2019		
	Single	Two-Person	Family
HMO	773.00		2,023.00
PPO	1,330.00		3,310.00
Managed Blue	345.09	690.18	
Medex	382.66	765.32	

Gross Expected FY 2019 Incurred Premiums	9,474,844
Adjustment to reflect children's claims	<u>(1,552,212)</u>
Total Expected FY 2019 Incurred Premiums (adults only)	7,922,632

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

	<u>Employer</u> <u>Primary</u>	<u>Medicare</u> <u>Primary</u>
Age 65	14,333	4,039
Average Age	9,519	4,461

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	8,388	3,510
25 to 29	8,388	3,778
30 to 34	8,388	4,552
35 to 39	8,388	5,434
40 to 44	8,388	6,393
45 to 49	9,308	7,627
50 to 54	10,222	9,212
55 to 59	11,124	11,207
60 to 64	12,581	13,438
65 to 69	13,860	14,806
70 & Over	15,318	16,347

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

Age Bracket	Aged (F) Average Claims	Aged (M) Average Claims
44 & Under	8,388	6,393
45 to 49	9,308	7,627
50 to 54	10,222	9,212
55 to 59	11,124	11,207
60 to 64	12,581	13,438
65 to 69	13,860	14,806
70 to 74	15,318	16,347
75 to 79	16,577	17,702
80 to 84	17,415	18,604
85 to 89	18,310	19,556
90 & Over	19,243	20,553

**ALL RETIREES AND SPOUSES - MEDICARE  
ELIGIBLE**

Age Bracket	Aged (F) Average Claims	Aged (M) Average Claims
65 to 69	3,905	4,172
70 to 74	4,316	4,606
75 to 79	4,671	4,988
80 to 84	4,907	5,242
85 to 89	5,159	5,510
90 & Over	5,422	5,791

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 2019		
				<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
<b>Dental Plan</b>				N/A		N/A
			FY 2019 Expected Per Person Rate			N/A

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 Norton
- c. Eligibility: An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
- d. Cost Sharing: Retirees pay 25%-30% of premiums

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

- a. Plan Type: Not Offered
- b. Administrator: N/A
- c. Eligibility: N/A
- d. Cost sharing: N/A

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

- a. Plan Type: Group Term Life Insurance - \$2,000.
- b. Administrator: Town of Norton
- c. Eligibility: Same as above
- d. Cost sharing: Retirees pay 25% of premiums

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	Retirees pay 25%-30% of premiums	Retirees pay 25%-30% of premiums
Dental	Retirees pay 100% of premiums	Retirees pay 100% of premiums
Life	Retirees pay 25% of premiums	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 \$1,759,835. The Town also made a contribution to an OPEB Trust of \$80,000 for a total contribution during the measurement period of \$1,839,835 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.

Investment Target Allocation & Expected Long-Term Real Rate of Return			
Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return
Domestic Equity - Large Cap	20.00%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	10.00%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	10.00%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	5.00%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	25.00%	Domestic Fixed Income	2.00%
International Fixed Income	10.00%	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%
Total	<u>100.00%</u>		
		I. Real Rate of Return	<u>4.30%</u>
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	7.05%
		IV. Investment Expense	0.25%
		V. Net Investment Return [III.-IV.]	6.80%

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	2,387,415
II. 30 year level flat dollar amortization of NOL at 3.50%	<u>3,640,689</u>
III. Actuarial Determined Contribution [I. + II.]	6,028,104
IV. Contributions in relation to the actuarially determined contribution	<u>(1,839,835)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>4,188,269</u>
Covered employee payroll	29,407,526
Contributions as a % of covered employee payroll	6.26%



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 0.42% funded. The Total OPEB Liability (TOL) for benefits was \$69,594,916, and the Fiduciary Net Position was \$291,612, resulting in a Net OPEB Liability (NOL) of \$69,303,304. The covered payroll (annual payroll of active employees covered by the plan) was \$ 29,407,526 and the ratio of the NOL to the covered payroll was 235.7%.

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.)	\$513,190	\$75,099,075	\$74,585,885	0.7%	\$31,198,444	239.1%
2019	07/01/2018 (est.)	\$393,427	\$72,237,599	\$71,844,172	0.5%	\$30,289,752	237.2%
2018	07/01/2017	\$291,612	\$69,594,916	\$69,303,304	0.4%	\$29,407,526	235.7%
2017	07/01/2016	\$190,985	\$62,533,766	\$62,342,781	0.3%	\$24,099,366	258.7%
2016	07/01/2015	\$111,437	\$59,970,409	\$59,858,972	0.2%	\$23,397,443	255.8%
2015	07/01/2014	\$51,179	\$57,231,170	\$57,179,991	0.1%	\$27,927,301	204.7%

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</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	137,700	102,065
VIII. Stocks	177,042	131,225
IX. Cash and cash equivalents	0	0
X. Real estate	0	0
XI. Alternative investments	<u>78,685</u>	<u>58,322</u>
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	<u>393,427</u>	<u>291,612</u>
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
<b>Total Assets</b>	<b>393,427</b>	<b>291,612</b>
<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>	<b>393,427</b>	<b>291,612</b>

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	<u>80,000</u>
Total Contributions	80,000
<u>Investment Income / (loss)</u>	
Interest	5,140
Dividends	2,625
Equity fund income, net	0
Net increase in fair value of investments	12,862
Securities lending income	0
Less investment expenses:	
Direct investment expense	0
Securities lending management fees	0
Securities lending borrower rebates	<u>0</u>
Net investment income	20,627
Other income	<u>0</u>
<b>Total Additions</b>	<b><u>100,627</u></b>
<b>Deductions</b>	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	<u>0</u>
<b>Total deductions</b>	<b><u>0</u></b>
<b>Net increase (decrease)</b>	<b>100,627</b>
<b>Net Position restricted for OPEB</b>	
As of July 1, 2016	<u>190,985</u>
As of July 1, 2017	291,612

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					Total
	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	
I. Total OPEB Liability	59,001,299	5,274,112	3,568,390	203,745	1,547,370	69,594,916
II. Fiduciary Net Position as of July 1, 2017	247,195	22,102	14,950	859	6,506	291,612
III. Net OPEB Liability (Asset) [I. - II.]	58,754,104	5,252,010	3,553,440	202,886	1,540,864	69,303,304
IV. Service Cost	1,769,223	260,758	296,389	22,432	38,613	2,387,415
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	1,907,193	175,898	122,745	7,175	50,106	2,263,117
VI. Projected Earnings on OPEB Plan Investments	(13,263)	(1,192)	(810)	(47)	(350)	(15,662)
VII. Net Recognition of Deferred (Inflows)/Outflows	550,728	49,230	33,308	1,902	14,443	649,611
VIII. Financial Statement Expense [IV. + V. + VI. + VII. + VIII. + VI. + VII.]	4,213,881	484,694	451,632	31,462	102,812	5,284,481
IX. Employer Share of Costs	(1,700,525)	(24,322)	(7,386)	(274)	(27,328)	(1,759,835)
X. Employer (Payments) Withdrawals to/from OPEB Trust	(67,277)	(6,291)	(4,396)	(257)	(1,779)	(80,000)
XI. Total Employer Contribution [IX. + X.]	(1,767,802)	(30,613)	(11,782)	(531)	(29,107)	(1,839,835)
XII. Net OPEB Expense [VIII. + XI.]	2,446,079	454,081	439,850	30,931	73,705	3,444,646
XIII. Actuarial Determined Contribution (ADC)	4,855,734	536,660	483,061	33,090	119,559	6,028,104
XIV. Total Expected Contribution	1,767,802	30,613	11,782	531	29,107	1,839,835
XV. Percentage of ADC Contributed [XIV. / XIII.]	36%	6%	2%	2%	24%	31%

	Fiscal Year Ending June 30, 2019					Total
	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	
I. Total OPEB Liability	60,748,545	5,680,837	3,969,847	232,147	1,606,223	72,237,599
II. Fiduciary Net Position as of July 1, 2018	332,911	30,068	20,494	1,183	8,771	393,427
III. Net OPEB Liability (Asset) [I. - II.]	60,415,634	5,650,769	3,949,353	230,964	1,597,452	71,844,172
IV. Service Cost	1,645,676	242,549	275,692	20,866	35,917	2,220,700
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	2,088,180	192,590	134,393	7,856	54,861	2,477,880
VI. Projected Earnings on OPEB plan investments	(19,200)	(1,726)	(1,173)	(68)	(506)	(22,673)
VII. Net Recognition of Deferred (Inflows)/Outflows	551,719	49,319	33,369	1,906	14,469	650,782
VIII. Financial Statement Expense [IV. + V. + VI. + VII.]	4,266,375	482,732	442,281	30,560	104,741	5,326,689
IX. Employer Share of Costs	(1,986,609)	(28,414)	(8,628)	(320)	(31,925)	(2,055,896)
X. Employer (Payments) Withdrawals to/from OPEB Trust	(71,482)	(6,684)	(4,671)	(273)	(1,890)	(85,000)
XI. Total Employer Contribution [IX. + X.]	(2,058,091)	(35,098)	(13,299)	(593)	(33,815)	(2,140,896)
XII. Net OPEB Expense [VIII. + XI.]	2,208,284	447,634	428,982	29,967	70,926	3,185,793
XIII. Actuarial Determined Contribution (ADC)	4,819,472	539,399	483,162	32,999	119,835	5,994,867
XIV. Total Expected Contribution	2,058,091	35,098	13,299	593	33,815	2,140,896
XV. Percentage of ADC Contributed [XIV. / XIII.]	43%	7%	3%	2%	28%	36%

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	2,908,201	2,257,597
II. Deferred (Inflow)/Outflow from Investment Experience	(3,972)	1,707
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	2,908,201
II. Deferred Outflow created during the period	3,558,805	5,857
III. Deferred Outflow recognized during the period	650,604	651,775
IV. Change in Deferred Outflow (II. - III. )	2,908,201	645,918
V. Deferred Outflow at end of the period (I. + IV. )	2,908,201	2,262,283
VI. Deferred Inflow at the beginning of the period	0	(3,972)
VII. Deferred Inflow created during the period	(4,965)	0
VIII. Deferred Inflow recognized during the period	(993)	(993)
IX. Deferred Inflow at end of the period (VII. - VIII. )	(3,972)	993
X. Deferred Inflow at end of the period (VI. + IX. )	(3,972)	(2,979)

<b>Net OPEB Liability</b>		
I. Net OPEB Liability at beginning of period	62,954,429	69,303,304
II. Service Cost	2,387,415	2,220,700
III. Interest on Total OPEB Liability, Service Cost, and Payments	2,263,117	2,477,880
IV. Projected Investment Income	(15,662)	(22,673)
V. Total Employer Contributions	(1,839,835)	(2,140,896)
VI. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + IV. + V. )	2,795,035	2,535,011
VII. Deferred Outflow created during the period	3,558,805	5,857
VIII. Deferred Inflow created during the period	(4,965)	0
IX. Net OPEB Liability at end of period (I. + VI. + VII. + VIII. )	69,303,304	71,844,172

<b>Net OPEB Expense</b>		
I. Service Cost	2,387,415	2,220,700
II. Interest on Total OPEB Liability, Service Cost, and Payments	2,263,117	2,477,880
III. Projected Investment Income	(15,662)	(22,673)
IV. Recognition of Deferred (Inflow)/Outflow	649,611	650,782
V. Financial Statement Expense (I. + II. + III. + IV. )	5,284,481	5,326,689
VI. Benefit Payments	(1,759,835)	(2,055,896)
VII. Contributions to Trust	(80,000)	(85,000)
VIII. Total Employer Payments (VI. + VII. )	(1,839,835)	(2,140,896)
IX. Total Employer Payments (V. + VIII. )	3,444,646	3,185,793

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	54,881,151	69,594,916	88,840,081
II. Fiduciary Net Position	<u>291,612</u>	<u>291,612</u>	<u>291,612</u>
III. Net OPEB Liability (Asset) [I.-II.]	54,589,539	69,303,304	88,548,469
IV. Service Cost	1,592,601	2,387,415	3,525,335

**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	56,964,081	72,237,599	92,214,904
II. Fiduciary Net Position	<u>393,427</u>	<u>393,427</u>	<u>393,427</u>
III. Net OPEB Liability (Asset) [I.-II.]	56,570,654	71,844,172	91,821,477
IV. Service Cost	1,481,541	2,220,701	3,278,942

**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 (2.50%)</u>	<u>Current Discount Rate (3.50%)</u>	<u>1% Increase (4.50%)</u>
I. Total OPEB Liability	82,377,867	69,594,916	59,557,993
II. Fiduciary Net Position	<u>291,612</u>	<u>291,612</u>	<u>291,612</u>
III. Net OPEB Liability (Asset) [I.-II.]	82,086,255	69,303,304	59,266,381
IV. Service Cost	3,209,571	2,387,415	1,796,805

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

	<u>1% Decrease (2.50%)</u>	<u>Current Discount Rate (3.50%)</u>	<u>1% Increase (4.50%)</u>
I. Total OPEB Liability	85,505,949	72,237,599	61,819,550
II. Fiduciary Net Position	<u>393,427</u>	<u>393,427</u>	<u>393,427</u>
III. Net OPEB Liability (Asset) [I.-II.]	85,112,522	71,844,172	61,426,123
IV. Service Cost	2,985,446	2,220,701	1,671,333

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: 3.50% per annum (previously 3.50%)  
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, the Town of Norton has established an irrevocable trust for the purposes of prefunding liabilities under GASB 74/75.

**16. OPEB EXPENSE DEVELOPMENT**

<b>Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2018</b>	
<b>Description</b>	<b>Amount</b>
I. Service Cost	2,387,415
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	2,263,117
III. Deferred (Inflows)/Outflows from Plan Design Changes*	0
IV. Deferred (Inflows)/Outflows from Plan Experience**	650,604
V. Deferred (Inflows)/Outflows from Changes of Assumptions**	0
VI. Projected earnings on OPEB plan investments	(15,662)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	(993)
VIII. Total Employer Contributions	(1,839,835)
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>3,444,646</b>

\* Recognized Immediately

\*\* Amortized over 5.47 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>	62,533,766	190,985	62,342,781
<b>II. Change in Assumptions for GASB 75</b>	<u>611,648</u>	<u>0</u>	<u>611,648</u>
<b>III. Balances at July 1, 2016 GASB 75 [I. + II.]</b>	<b>63,145,414</b>	190,985	62,954,429
<b>Changes for the year:</b>			
IV. Service Cost	2,387,415	0	2,387,415
V. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	2,263,117	0	2,263,117
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	3,558,805	0	3,558,805
IX. Net Investment Income	0	20,627	(20,627)
X. Employer Contributions to Trust	0	1,839,835	(1,839,835)
XI. Benefit Payments Withdrawn from Trust	0	(1,759,835)	1,759,835
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.]	(1,759,835)	0	(1,759,835)
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>6,449,502</u>	<u>100,627</u>	<u>6,348,875</u>
<b>XVII. Balances at July 1, 2017 [III.+XVII.]</b>	69,594,916	291,612	69,303,304

\* Recognized Immediately

\*\* Amortized over 5.47 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	66,845	102,065
Stocks	85,943	131,225
Cash and cash equivalents	0	0
Real estate	0	0
Alternative investments	38,197	58,322
Invested securities lending cash collateral	0	0
<b>Liabilities</b>		
Securities lending cash collateral	0	0
Payable to brokers for unsettled trades	0	0
<b>Total OPEB plan investments</b>	<b>190,985</b>	<b>291,612</b>

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	190,985	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	80,000	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	80,000		
III. Earnings and increase in fair value	20,627		
IV. Ending value - June 30, 2017 [I.+II.+III.]	291,612		
Money Weighted Rate of Return	<b>8.24%</b>		
Asset Value - June 30, 2017	291,612		

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	80,000
Other income	0
<b>Deductions</b>	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Beginning balances of noninvestment-related assets and liabilities	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Ending balances of noninvestment-related assets and liabilities	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Change in capital assets - depreciation	0
<b>Aggregate external cash flows</b>	<b>80,000</b>

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>	
<b><u>For the Year Ending on the July 1, 2017 Measurement Date</u></b>	
I. Total OPEB plan investments on July 1, 2016	190,985
II. Aggregate external cash flows	80,000
III. Net investment income	<u>20,627</u>
IV. Total OPEB plan investments on July 1, 2017 [I.+II.+III.]	<u><u>291,612</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	29,407,526	0	29,407,526	0	1,759,835	0	1,759,835
July 1, 2018	27,649,923	2,639,829	30,289,752	0	2,055,896	0	2,055,896
July 1, 2019	26,255,979	4,942,466	31,198,445	0	2,071,229	0	2,071,229
July 1, 2020	25,059,073	7,075,325	32,134,398	0	2,155,817	0	2,155,817
July 1, 2021	23,986,732	9,111,698	33,098,430	0	2,286,994	0	2,286,994
July 1, 2022	23,072,279	11,019,104	34,091,383	0	2,398,279	0	2,398,279
July 1, 2023	22,108,585	13,005,539	35,114,124	0	2,509,217	0	2,509,217
July 1, 2024	21,293,056	14,874,492	36,167,548	0	2,641,677	0	2,641,677
July 1, 2025	20,430,637	16,821,937	37,252,574	0	2,801,280	0	2,801,280
July 1, 2026	19,552,849	18,817,302	38,370,151	0	2,915,131	0	2,915,131
July 1, 2027	18,605,752	20,915,504	39,521,256	0	3,051,640	0	3,051,640
July 1, 2028	17,663,906	23,042,988	40,706,894	0	3,226,143	0	3,226,143
July 1, 2029	16,677,988	25,250,113	41,928,101	0	3,420,877	18,635	3,439,512
July 1, 2030	15,744,810	27,441,134	43,185,944	0	3,565,632	49,446	3,615,078
July 1, 2031	14,724,503	29,757,019	44,481,522	0	3,731,597	93,762	3,825,359
July 1, 2032	13,804,766	32,011,202	45,815,968	0	3,921,655	152,591	4,074,246
July 1, 2033	12,909,991	34,280,456	47,190,447	0	4,048,189	224,880	4,273,069
July 1, 2034	11,953,797	36,652,363	48,606,160	0	4,197,907	284,591	4,482,498
July 1, 2035	11,127,707	38,936,638	50,064,345	0	4,285,285	353,748	4,639,033
July 1, 2036	10,318,074	41,248,201	51,566,275	0	4,362,419	431,811	4,794,230
July 1, 2037	9,474,527	43,638,736	53,113,263	0	4,420,266	502,528	4,922,794
July 1, 2038	8,721,930	45,984,731	54,706,661	0	4,490,003	580,559	5,070,562
July 1, 2039	7,893,853	48,454,008	56,347,861	0	4,552,733	686,245	5,238,978
July 1, 2040	7,165,406	50,872,891	58,038,297	0	4,607,607	826,455	5,434,062
July 1, 2041	6,468,185	53,311,261	59,779,446	0	4,660,096	1,001,627	5,661,723
July 1, 2042	5,893,993	55,678,836	61,572,829	0	4,765,563	1,213,279	5,978,842
July 1, 2043	5,370,748	58,049,266	63,420,014	0	4,786,868	1,461,022	6,247,890
July 1, 2044	4,811,790	60,510,824	65,322,614	0	4,758,597	1,680,098	6,438,695
July 1, 2045	4,334,777	62,947,515	67,282,292	0	4,837,211	1,922,837	6,760,048
July 1, 2046	3,885,996	65,414,765	69,300,761	0	4,889,393	2,190,425	7,079,818
July 1, 2047	3,420,532	67,959,252	71,379,784	0	4,877,039	2,446,662	7,323,701
July 1, 2048	2,979,056	70,542,122	73,521,178	0	4,899,738	2,722,389	7,622,127
July 1, 2049	2,607,595	73,119,218	75,726,813	0	4,914,670	3,035,109	7,949,779
July 1, 2050	2,252,744	75,745,873	77,998,617	0	4,944,459	3,379,802	8,324,261
July 1, 2051	1,926,864	78,411,712	80,338,576	0	4,927,995	3,758,841	8,686,836
July 1, 2052	1,591,149	81,157,584	82,748,733	0	4,924,938	4,174,135	9,099,073
July 1, 2053	1,297,584	83,933,611	85,231,195	0	4,873,772	4,629,344	9,503,116
July 1, 2054	1,062,975	86,725,156	87,788,131	0	4,818,068	5,091,805	9,909,873
July 1, 2055	838,437	89,583,338	90,421,775	0	4,787,113	5,585,339	10,372,452
July 1, 2056	633,772	92,500,656	93,134,428	0	4,666,790	6,111,211	10,778,001

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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	461,906	95,466,555	95,928,461	0	4,627,211	6,659,762	11,286,973
July 1, 2058	321,610	98,484,705	98,806,315	0	4,516,204	7,227,176	11,743,380
July 1, 2059	240,746	101,529,758	101,770,504	0	4,420,491	7,847,263	12,267,754
July 1, 2060	170,094	104,653,525	104,823,619	0	4,309,452	8,506,940	12,816,392
July 1, 2061	116,348	107,851,980	107,968,328	0	4,228,761	9,207,314	13,436,075
July 1, 2062	50,698	111,156,680	111,207,378	0	4,101,678	9,955,643	14,057,321
July 1, 2063	28,985	114,514,614	114,543,599	0	3,963,516	10,751,661	14,715,177
July 1, 2064	7,761	117,972,146	117,979,907	0	3,851,326	11,583,008	15,434,334
July 1, 2065	2,155	121,517,149	121,519,304	0	3,707,554	12,459,939	16,167,493
July 1, 2066	0	125,164,883	125,164,883	0	3,581,327	13,382,068	16,963,395
July 1, 2067	0	128,919,829	128,919,829	0	3,448,824	14,343,442	17,792,266
July 1, 2068	0	132,787,424	132,787,424	0	3,311,614	15,352,689	18,664,303
July 1, 2069	0	136,771,047	136,771,047	0	3,171,131	16,411,279	19,582,410
July 1, 2070	0	140,874,178	140,874,178	0	3,027,741	17,522,760	20,550,501
July 1, 2071	0	145,100,403	145,100,403	0	2,882,921	18,688,643	21,571,564
July 1, 2072	0	149,453,415	149,453,415	0	2,736,983	19,912,702	22,649,685
July 1, 2073	0	153,937,017	153,937,017	0	2,591,173	21,197,085	23,788,258
July 1, 2074	0	158,555,128	158,555,128	0	2,445,578	22,542,360	24,987,938
July 1, 2075	0	163,311,782	163,311,782	0	2,301,087	23,949,260	26,250,347
July 1, 2076	0	168,211,135	168,211,135	0	2,157,295	25,423,593	27,580,888
July 1, 2077	0	173,257,469	173,257,469	0	2,015,315	26,965,556	28,980,871
July 1, 2078	0	178,455,193	178,455,193	0	1,875,296	28,577,775	30,453,071
July 1, 2079	0	183,808,849	183,808,849	0	1,737,517	30,263,868	32,001,385
July 1, 2080	0	189,323,114	189,323,114	0	1,602,431	32,030,908	33,633,339
July 1, 2081	0	195,002,807	195,002,807	0	1,470,692	33,881,561	35,352,253
July 1, 2082	0	200,852,891	200,852,891	0	1,342,642	35,819,712	37,162,354
July 1, 2083	0	206,878,478	206,878,478	0	1,218,817	37,852,712	39,071,529
July 1, 2084	0	213,084,832	213,084,832	0	1,099,382	39,985,220	41,084,602
July 1, 2085	0	219,477,377	219,477,377	0	985,052	42,219,960	43,205,012
July 1, 2086	0	226,061,698	226,061,698	0	875,985	44,565,339	45,441,324
July 1, 2087	0	232,843,549	232,843,549	0	773,307	47,026,262	47,799,569
July 1, 2088	0	239,828,855	239,828,855	0	676,990	49,607,647	50,284,637
July 1, 2089	0	247,023,721	247,023,721	0	587,552	52,315,764	52,903,316
July 1, 2090	0	254,434,433	254,434,433	0	505,604	55,160,381	55,665,985
July 1, 2091	0	262,067,466	262,067,466	0	430,632	58,147,423	58,578,055
July 1, 2092	0	269,929,490	269,929,490	0	363,364	61,284,245	61,647,609
July 1, 2093	0	278,027,375	278,027,375	0	303,095	64,580,477	64,883,572
July 1, 2094	0	286,368,196	286,368,196	0	250,517	68,044,395	68,294,912
July 1, 2095	0	294,959,242	294,959,242	0	204,177	71,683,292	71,887,469

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	190,985	1,759,835	1,759,835	0	80,000	80,000	20,627	291,612
July 1, 2018	291,612	2,055,896	2,055,896	0	85,000	77,592	16,815	386,019
July 1, 2019	386,019	2,071,229	2,071,229	0	90,000	75,742	29,259	491,020
July 1, 2020	491,020	2,155,817	2,155,817	0	95,000	74,083	36,566	601,669
July 1, 2021	601,669	2,286,994	2,286,994	0	100,000	72,471	44,258	718,398
July 1, 2022	718,398	2,398,279	2,398,279	0	105,000	71,062	52,362	841,822
July 1, 2023	841,822	2,509,217	2,509,217	0	110,000	69,258	60,922	972,002
July 1, 2024	972,002	2,641,677	2,641,677	0	115,000	67,704	69,942	1,109,648
July 1, 2025	1,109,648	2,801,280	2,801,280	0	120,000	65,812	79,469	1,254,929
July 1, 2026	1,254,929	2,915,131	2,915,131	0	125,000	63,698	89,515	1,408,142
July 1, 2027	1,408,142	3,051,640	3,051,640	0	130,000	61,201	100,101	1,569,444
July 1, 2028	1,569,444	3,226,143	3,226,143	0	135,000	58,580	111,237	1,739,261
July 1, 2029	1,739,261	3,420,877	3,420,877	0	140,000	55,689	122,951	1,899,266
July 1, 2030	1,899,266	3,565,632	3,565,632	0	145,000	52,864	133,999	2,036,683
July 1, 2031	2,036,683	3,731,597	3,731,597	0	150,000	49,654	143,511	2,136,086
July 1, 2032	2,136,086	3,921,655	4,074,246	0	155,000	46,703	150,437	2,180,635
July 1, 2033	2,180,635	4,048,189	4,273,069	0	160,000	43,772	153,634	2,153,161
July 1, 2034	2,153,161	4,197,907	4,482,498	0	165,000	40,579	151,933	2,061,082
July 1, 2035	2,061,082	4,285,285	4,639,033	0	170,000	37,786	145,839	1,890,959
July 1, 2036	1,890,959	4,362,419	4,794,230	0	175,000	35,016	134,437	1,628,601
July 1, 2037	1,628,601	4,420,266	4,922,794	0	180,000	32,109	116,764	1,274,946
July 1, 2038	1,274,946	4,490,003	5,070,562	0	185,000	29,495	92,883	816,765
July 1, 2039	816,765	4,552,733	5,238,978	0	190,000	26,617	61,894	219,031
July 1, 2040	219,031	4,607,607	5,434,062	0	195,000	24,075	21,415	45,490
July 1, 2041	45,490	4,660,096	5,661,723	0	200,000	21,640	9,781	31,421
July 1, 2042	31,421	4,765,563	5,978,842	0	205,000	19,623	8,992	28,615
July 1, 2043	28,615	4,786,868	6,247,890	0	210,000	17,784	8,968	26,752
July 1, 2044	26,752	4,758,597	6,438,695	0	215,000	15,837	9,009	24,846
July 1, 2045	24,846	4,837,211	6,760,048	0	220,000	14,174	9,047	23,221
July 1, 2046	23,221	4,889,393	7,079,818	0	225,000	12,617	9,103	21,720
July 1, 2047	21,720	4,877,039	7,323,701	0	230,000	11,022	9,168	20,190
July 1, 2048	20,190	4,899,738	7,622,127	0	235,000	9,522	9,232	18,754
July 1, 2049	18,754	4,914,670	7,949,779	0	240,000	8,264	9,301	17,565
July 1, 2050	17,565	4,944,459	8,324,261	0	245,000	7,076	9,387	16,463
July 1, 2051	16,463	4,927,995	8,686,836	0	250,000	5,996	9,480	15,476
July 1, 2052	15,476	4,924,938	9,099,073	0	255,000	4,903	9,580	14,483
July 1, 2053	14,483	4,873,772	9,503,116	0	260,000	3,958	9,679	13,637
July 1, 2054	13,637	4,818,068	9,909,873	0	265,000	3,209	9,789	12,998
July 1, 2055	12,998	4,787,113	10,372,452	0	270,000	2,504	9,913	12,417
July 1, 2056	12,417	4,666,790	10,778,001	0	275,000	1,871	10,041	11,912



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FINANCIAL STATEMENT DISCLOSURE  
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(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	II. Portion of			IV. Administrative Expense	V. Total Contributions to Trust	VI. Contributions		VIII. Ending Fiduciary Net Position for Current Plan Members
	Fiduciary Net	Employer		III. Total Benefit Payments			to Trust for		
	Position for Current Plan Members	Contributions for Current Plan Members	Benefit Payments				Current Plan Members	VII. Investment Earnings	
July 1, 2057	11,912	4,627,211	11,286,973	0	280,000	1,348	10,173	11,521	
July 1, 2058	11,521	4,516,204	11,743,380	0	285,000	928	10,314	11,242	
July 1, 2059	11,242	4,420,491	12,267,754	0	290,000	686	10,462	11,148	
July 1, 2060	11,148	4,309,452	12,816,392	0	295,000	479	10,623	11,102	
July 1, 2061	11,102	4,228,761	13,436,075	0	300,000	323	10,787	11,110	
July 1, 2062	11,110	4,101,678	14,057,321	0	305,000	139	10,955	11,094	
July 1, 2063	11,094	3,963,516	14,715,177	0	310,000	78	11,121	11,199	
July 1, 2064	11,199	3,851,326	15,434,334	0	315,000	21	11,295	11,316	
July 1, 2065	11,316	3,707,554	16,167,493	0	320,000	6	11,471	11,477	
July 1, 2066	11,477	3,581,327	16,963,395	0	325,000	0	11,649	11,649	
July 1, 2067	11,649	3,448,824	17,792,266	0	330,000	0	11,828	11,828	
July 1, 2068	11,828	3,311,614	18,664,303	0	335,000	0	12,007	12,007	
July 1, 2069	12,007	3,171,131	19,582,410	0	340,000	0	12,186	12,186	
July 1, 2070	12,186	3,027,741	20,550,501	0	345,000	0	12,366	12,366	
July 1, 2071	12,366	2,882,921	21,571,564	0	350,000	0	12,545	12,545	
July 1, 2072	12,545	2,736,983	22,649,685	0	355,000	0	12,725	12,725	
July 1, 2073	12,725	2,591,173	23,788,258	0	360,000	0	12,904	12,904	
July 1, 2074	12,904	2,445,578	24,987,938	0	365,000	0	13,083	13,083	
July 1, 2075	13,083	2,301,087	26,250,347	0	370,000	0	13,263	13,263	
July 1, 2076	13,263	2,157,295	27,580,888	0	375,000	0	13,442	13,442	
July 1, 2077	13,442	2,015,315	28,980,871	0	380,000	0	13,622	13,622	
July 1, 2078	13,622	1,875,296	30,453,071	0	385,000	0	13,801	13,801	
July 1, 2079	13,801	1,737,517	32,001,385	0	390,000	0	13,980	13,980	
July 1, 2080	13,980	1,602,431	33,633,339	0	395,000	0	14,160	14,160	
July 1, 2081	14,160	1,470,692	35,352,253	0	400,000	0	14,339	14,339	
July 1, 2082	14,339	1,342,642	37,162,354	0	405,000	0	14,519	14,519	
July 1, 2083	14,519	1,218,817	39,071,529	0	410,000	0	14,698	14,698	
July 1, 2084	14,698	1,099,382	41,084,602	0	415,000	0	14,877	14,877	
July 1, 2085	14,877	985,052	43,205,012	0	420,000	0	15,057	15,057	
July 1, 2086	15,057	875,985	45,441,324	0	425,000	0	15,236	15,236	
July 1, 2087	15,236	773,307	47,799,569	0	430,000	0	15,416	15,416	
July 1, 2088	15,416	676,990	50,284,637	0	435,000	0	15,595	15,595	
July 1, 2089	15,595	587,552	52,903,316	0	440,000	0	15,774	15,774	
July 1, 2090	15,774	505,604	55,665,985	0	445,000	0	15,954	15,954	
July 1, 2091	15,954	430,632	58,578,055	0	450,000	0	16,133	16,133	
July 1, 2092	16,133	363,364	61,647,609	0	455,000	0	16,313	16,313	
July 1, 2093	16,313	303,095	64,883,572	0	460,000	0	16,492	16,492	
July 1, 2094	16,492	250,517	68,294,912	0	465,000	0	16,671	16,671	
July 1, 2095	16,671	204,177	71,887,469	0	470,000	0	16,851	16,851	

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FINANCIAL STATEMENT DISCLOSURE  
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(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		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
	Fiduciary Net Position for Current Plan Members	Benefit Payments					
July 1, 2017	190,985	1,759,835	190,985	1,568,850	190,985	1,568,850	1,759,835
July 1, 2018	291,612	2,058,950	291,612	1,767,338	273,045	1,713,733	1,990,509
July 1, 2019	386,019	2,133,176	386,019	1,747,157	338,428	1,642,779	1,993,716
July 1, 2020	491,020	2,247,612	491,020	1,756,592	403,075	1,601,555	2,030,843
July 1, 2021	601,669	2,333,221	601,669	1,731,552	462,458	1,530,841	2,038,117
July 1, 2022	718,398	2,412,915	718,398	1,694,517	517,022	1,452,661	2,037,669
July 1, 2023	841,822	2,509,217	841,822	1,667,395	567,274	1,386,055	2,048,557
July 1, 2024	972,002	2,641,677	972,002	1,669,675	613,294	1,345,852	2,085,009
July 1, 2025	1,109,648	2,801,280	1,109,648	1,691,632	655,564	1,322,193	2,137,485
July 1, 2026	1,254,929	2,915,131	1,254,929	1,660,202	694,189	1,258,270	2,150,418
July 1, 2027	1,408,142	3,051,640	1,408,142	1,643,498	729,347	1,207,829	2,176,289
July 1, 2028	1,569,444	3,226,143	1,569,444	1,656,699	761,136	1,180,602	2,224,258
July 1, 2029	1,739,261	3,420,877	1,739,261	1,681,616	789,787	1,162,012	2,280,118
July 1, 2030	1,899,266	3,565,632	1,899,266	1,666,366	807,532	1,116,549	2,297,602
July 1, 2031	2,036,683	3,731,597	2,036,683	1,694,914	810,823	1,101,232	2,324,616
July 1, 2032	2,136,086	3,921,655	2,136,086	1,785,569	796,251	1,124,945	2,361,806
July 1, 2033	2,180,635	4,048,189	2,180,635	1,867,554	761,102	1,140,910	2,356,969
July 1, 2034	2,153,161	4,197,907	2,153,161	2,044,746	703,664	1,211,271	2,362,894
July 1, 2035	2,061,082	4,285,285	2,061,082	2,224,203	630,685	1,277,615	2,331,898
July 1, 2036	1,890,959	4,362,419	1,890,959	2,471,460	541,787	1,376,584	2,294,962
July 1, 2037	1,628,601	4,420,266	1,628,601	2,791,665	436,908	1,507,773	2,248,096
July 1, 2038	1,274,946	4,490,003	1,274,946	3,215,057	320,255	1,683,779	2,207,656
July 1, 2039	816,765	4,552,733	816,765	3,735,968	192,101	1,897,244	2,164,090
July 1, 2040	219,031	4,607,607	219,031	4,388,576	48,235	2,161,063	2,117,370
July 1, 2041	45,490	4,660,096	45,490	4,614,606	9,380	2,203,444	2,070,306
July 1, 2042	31,421	4,765,563	31,421	4,734,142	6,067	2,191,958	2,046,785
July 1, 2043	28,615	4,786,868	28,615	4,758,253	5,173	2,136,300	1,987,595
July 1, 2044	26,752	4,758,597	26,752	4,731,845	4,528	2,060,007	1,910,177
July 1, 2045	24,846	4,837,211	24,846	4,812,365	3,938	2,031,517	1,877,189
July 1, 2046	23,221	4,889,393	23,221	4,866,172	3,446	1,991,925	1,834,367
July 1, 2047	21,720	4,877,039	21,720	4,855,319	3,018	1,927,201	1,768,911
July 1, 2048	20,190	4,899,738	20,190	4,879,548	2,627	1,878,073	1,718,070
July 1, 2049	18,754	4,914,670	18,754	4,895,916	2,285	1,827,218	1,666,022
July 1, 2050	17,565	4,944,459	17,565	4,926,894	2,004	1,783,008	1,620,404
July 1, 2051	16,463	4,927,995	16,463	4,911,532	1,758	1,723,537	1,561,325
July 1, 2052	15,476	4,924,938	15,476	4,909,462	1,548	1,670,557	1,508,489
July 1, 2053	14,483	4,873,772	14,483	4,859,289	1,356	1,603,333	1,443,194
July 1, 2054	13,637	4,818,068	13,637	4,804,431	1,196	1,537,151	1,379,275
July 1, 2055	12,998	4,787,113	12,998	4,774,115	1,067	1,481,123	1,324,860
July 1, 2056	12,417	4,666,790	12,417	4,654,373	954	1,400,178	1,248,627

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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 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
	Fiduciary Net Position for Current Plan Members	Benefit Payments					
July 1, 2057	11,912	4,627,211	11,912	4,615,299	857	1,346,311	1,196,884
July 1, 2058	11,521	4,516,204	11,521	4,504,683	776	1,274,188	1,129,340
July 1, 2059	11,242	4,420,491	11,242	4,409,249	709	1,209,365	1,068,661
July 1, 2060	11,148	4,309,452	11,148	4,298,304	659	1,143,177	1,007,187
July 1, 2061	11,102	4,228,761	11,102	4,217,659	614	1,087,706	955,475
July 1, 2062	11,110	4,101,678	11,110	4,090,568	575	1,022,934	895,955
July 1, 2063	11,094	3,963,516	11,094	3,952,422	538	958,409	836,996
July 1, 2064	11,199	3,851,326	11,199	3,840,127	509	902,935	786,269
July 1, 2065	11,316	3,707,554	11,316	3,696,238	481	842,742	731,757
July 1, 2066	11,477	3,581,327	11,477	3,569,850	457	789,239	683,348
July 1, 2067	11,649	3,448,824	11,649	3,437,175	434	736,858	636,190
July 1, 2068	11,828	3,311,614	11,828	3,299,786	413	685,948	590,574
July 1, 2069	12,007	3,171,131	12,007	3,159,124	392	636,790	546,722
July 1, 2070	12,186	3,027,741	12,186	3,015,555	373	589,414	504,649
July 1, 2071	12,366	2,882,921	12,366	2,870,555	354	544,055	464,539
July 1, 2072	12,545	2,736,983	12,545	2,724,438	337	500,699	426,363
July 1, 2073	12,725	2,591,173	12,725	2,578,448	320	459,497	390,232
July 1, 2074	12,904	2,445,578	12,904	2,432,674	304	420,370	356,062
July 1, 2075	13,083	2,301,087	13,083	2,288,004	288	383,379	323,889
July 1, 2076	13,263	2,157,295	13,263	2,144,032	273	348,358	293,556
July 1, 2077	13,442	2,015,315	13,442	2,001,873	260	315,395	265,120
July 1, 2078	13,622	1,875,296	13,622	1,861,674	246	284,411	238,500
July 1, 2079	13,801	1,737,517	13,801	1,723,716	234	255,347	213,631
July 1, 2080	13,980	1,602,431	13,980	1,588,451	222	228,172	190,473
July 1, 2081	14,160	1,470,692	14,160	1,456,532	210	202,877	169,003
July 1, 2082	14,339	1,342,642	14,339	1,328,303	199	179,405	149,160
July 1, 2083	14,519	1,218,817	14,519	1,204,298	189	157,723	130,902
July 1, 2084	14,698	1,099,382	14,698	1,084,684	179	137,749	114,150
July 1, 2085	14,877	985,052	14,877	970,175	170	119,470	98,879
July 1, 2086	15,057	875,985	15,057	860,928	161	102,801	85,008
July 1, 2087	15,236	773,307	15,236	758,071	152	87,774	72,550
July 1, 2088	15,416	676,990	15,416	661,574	144	74,277	61,402
July 1, 2089	15,595	587,552	15,595	571,957	137	62,268	51,519
July 1, 2090	15,774	505,604	15,774	489,830	129	51,710	42,860
July 1, 2091	15,954	430,632	15,954	414,678	123	42,448	35,291
July 1, 2092	16,133	363,364	16,133	347,231	116	34,466	28,788
July 1, 2093	16,313	303,095	16,313	286,782	110	27,603	23,215
July 1, 2094	16,492	250,517	16,492	234,025	104	21,842	18,550
July 1, 2095	16,671	204,177	16,671	187,506	98	16,969	14,616

EXHIBIT A

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

**21. CHANGES TO NET OPEB EXPENSE**

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of differences between expected & actual experience								
Fiscal Year	Differences between actual & expected experience		<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
	Recognition Period (years)							
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	3,558,805	5.47	650,604	650,604	650,604	650,604	650,604	305,785
2019								
Net increase (decrease) in OPEB expense			650,604	650,604	650,604	650,604	650,604	305,785

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>
	Actuarial Assumptions	Recognition Period (years)						
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	0	5.47	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)**

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of differences between Projected & Actual Earnings on OPEB Plan Investments								
Fiscal Year	Differences		<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
	between actual & expected earnings	Recognition Period (years)						
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	(4,965)	5.00	(993)	(993)	(993)	(993)	(993)	0
2019	5,857	5.00		<u>1,171</u>	<u>1,171</u>	<u>1,171</u>	<u>1,171</u>	<u>1,173</u>
Net increase (decrease) in OPEB expense			(993)	178	178	178	178	1,173

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:	6.80%, 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:	3.50%, 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:	416
Active Employees:	<u>440</u>
Total:	856

Changes in Assumptions: Effective July 1, 2017

- None.



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	3,558,805	0	650,604	<u>2,908,201</u>	<u>0</u>
<b>Total</b>				<b>2,908,201</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	(4,965)	(993)	0	(3,972)
<b>Total</b>				0	(3,972)

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	2,908,201	0
II. Changes of assumptions	0	0
III. Net difference between projected & actual earnings on OPEB plan investments	<u>0</u>	<u>(3,972)</u>
IV. Total [I.+II.+III.]	2,908,201	(3,972)
<b>Year ended June 30:</b>		
	2019	649,611
	2020	649,611
	2021	649,611
	2022	649,611
	2023	305,785
	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 \$80,000 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 \$1,759,835 .

EXHIBIT C

PLAN DEMOGRAPHICS

(As of the July 1, 2017 Valuation Date)

**ACTIVE EMPLOYEES**

Valuation Date	<u>July 1, 2017</u>	<u>July 1, 2015</u>
<b>A. Average Age at Hire</b>	33.30	33.68
<b>B. Average Service</b>	<u>10.98</u>	<u>10.75</u>
<b>C. Average Current Age</b>	44.28	44.43

**RETIRED EMPLOYEES & DEPENDENTS**

	<u>July 1, 2017</u>	<u>July 1, 2015</u>
<b>I. Retirees</b>		
<b>A. Under Age 65</b>	72	70
<b>B. Age 65 &amp; Over</b>	<u>310</u>	<u>281</u>
<b>C. Total Retirees</b>	382	351
<b>II. Dependents of Retirees</b>		
<b>A. Under Age 65</b>	27	21
<b>B. Age 65 &amp; Over</b>	<u>7</u>	<u>7</u>
<b>C. Total Retirees</b>	34	28
<b>III. Retirees &amp; Dependents</b>		
<b>A. Under Age 65</b>	99	91
<b>B. Age 65 &amp; Over</b>	<u>317</u>	<u>288</u>
<b>C. Total Retirees</b>	416	379

EXHIBIT D

PROJECTED CASH FLOWS (OPEN GROUP)

Total Medical, Dental & Life Insurance - Funding - 3.50% 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 Date with expected 6.80% return		III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I.]		V. Service Cost	VI. Employer Share of Premiums / Claims		VII. Excess Employer Payments (beyond claims)	VIII. Total Employer Payments [VI. + VII.]
		Measurement Date	as of Measurement Date	Measurement Date	expected 6.80% return		Funded Ratio	Employer Share of Premiums / Claims					
2018	July 1, 2017	69,594,916	291,612	69,303,304	0.42%	2,387,415	1,759,835	80,000	1,839,835				
2019	July 1, 2018	72,237,599	393,427	71,844,172	0.54%	2,220,701	2,055,896	85,000	2,140,896				
2020	July 1, 2019	75,099,075	513,190	74,585,885	0.68%	2,357,801	2,071,229	90,000	2,161,229				
2021	July 1, 2020	78,196,338	646,264	77,550,074	0.83%	2,488,604	2,155,817	95,000	2,250,817				
2022	July 1, 2021	81,334,490	793,554	80,540,936	0.98%	2,627,040	2,286,994	100,000	2,386,994				
2023	July 1, 2022	84,608,653	956,027	83,652,626	1.13%	2,774,235	2,398,279	105,000	2,503,279				
2024	July 1, 2023	88,037,166	1,134,715	86,902,451	1.29%	2,934,315	2,509,217	110,000	2,619,217				
2025	July 1, 2024	91,596,106	1,330,721	90,265,385	1.45%	3,090,769	2,641,677	115,000	2,756,677				
2026	July 1, 2025	95,275,725	1,545,223	93,730,502	1.62%	3,270,137	2,801,280	120,000	2,921,280				
2027	July 1, 2026	99,136,862	1,779,478	97,357,384	1.79%	3,442,715	2,915,131	125,000	3,040,131				
2028	July 1, 2027	103,180,012	2,034,830	101,145,182	1.97%	3,641,282	3,051,640	130,000	3,181,640				
2029	July 1, 2028	107,361,374	2,312,713	105,048,661	2.15%	3,836,409	3,226,143	135,000	3,361,143				
2030	July 1, 2029	111,643,157	2,614,659	109,028,498	2.34%	4,037,302	3,439,512	140,000	3,579,512				
2031	July 1, 2030	116,091,770	2,942,305	113,149,465	2.53%	4,252,908	3,615,078	145,000	3,760,078				
2032	July 1, 2031	120,689,199	3,297,398	117,391,801	2.73%	4,491,375	3,825,359	150,000	3,975,359				
2033	July 1, 2032	125,380,644	3,681,804	121,698,840	2.94%	4,727,946	4,074,246	155,000	4,229,246				
2034	July 1, 2033	130,253,077	4,097,517	126,155,560	3.15%	4,994,610	4,273,069	160,000	4,433,069				
2035	July 1, 2034	135,320,729	4,546,666	130,774,063	3.36%	5,267,288	4,482,498	165,000	4,647,498				
2036	July 1, 2035	140,663,909	5,031,524	135,632,385	3.58%	5,539,984	4,639,033	170,000	4,809,033				
2037	July 1, 2036	146,315,743	5,554,520	140,761,223	3.80%	5,845,728	4,794,230	175,000	4,969,230				
2038	July 1, 2037	152,334,022	6,118,247	146,215,775	4.02%	6,159,664	4,922,794	180,000	5,102,794				
2039	July 1, 2038	158,746,731	6,725,474	152,021,257	4.24%	6,484,722	5,070,562	185,000	5,255,562				
2040	July 1, 2039	165,428,535	7,379,160	158,049,375	4.46%	6,833,445	5,238,978	190,000	5,428,978				
2041	July 1, 2040	172,500,389	8,082,464	164,417,925	4.69%	7,187,111	5,434,062	195,000	5,629,062				
2042	July 1, 2041	180,049,080	8,838,760	171,210,320	4.91%	7,586,721	5,661,723	200,000	5,861,723				
2043	July 1, 2042	188,004,030	9,651,651	178,352,379	5.13%	7,995,775	5,978,842	205,000	6,183,842				
2044	July 1, 2043	196,344,052	10,524,986	185,819,066	5.36%	8,426,341	6,247,890	210,000	6,457,890				
2045	July 1, 2044	205,214,716	11,462,875	193,751,841	5.59%	8,875,412	6,438,695	215,000	6,653,695				
2046	July 1, 2045	214,509,706	12,469,707	202,039,999	5.81%	9,348,678	6,760,048	220,000	6,980,048				
2047	July 1, 2046	224,315,661	13,550,171	210,765,490	6.04%	9,853,184	7,079,818	225,000	7,304,818				
2048	July 1, 2047	234,702,889	14,709,274	219,993,615	6.27%	10,378,068	7,323,701	230,000	7,553,701				
2049	July 1, 2048	245,713,224	15,952,363	229,760,861	6.49%	10,925,530	7,622,127	235,000	7,857,127				

EXHIBIT D

PROJECTED CASH FLOWS (OPEN GROUP)

**Total Medical, Dental & Life Insurance - 7.00% 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 Date with expected 6.80% return	III. Net OPEB Liability (Asset) ("NOL") [I. - II.]					
2018	July 1, 2017	42,289,407	291,612	41,997,795	0.69%	919,439	1,759,835	80,000	1,839,835
2019	July 1, 2018	43,964,958	393,427	43,571,531	0.89%	855,234	2,055,896	1,675,566	3,731,462
2020	July 1, 2019	45,806,395	2,151,778	43,654,617	4.70%	915,987	2,071,229	1,675,566	3,746,795
2021	July 1, 2020	47,747,223	4,029,697	43,717,526	8.44%	972,996	2,155,817	1,675,566	3,831,383
2022	July 1, 2021	49,747,201	6,035,315	43,711,886	12.13%	1,032,480	2,286,994	1,675,566	3,962,560
2023	July 1, 2022	51,834,885	8,177,315	43,657,570	15.78%	1,094,897	2,398,279	1,675,566	4,073,845
2024	July 1, 2023	54,022,152	10,464,971	43,557,181	19.37%	1,162,323	2,509,217	1,675,566	4,184,783
2025	July 1, 2024	56,290,972	12,908,187	43,382,785	22.93%	1,227,911	2,641,677	1,675,566	4,317,243
2026	July 1, 2025	58,628,205	15,517,542	43,110,663	26.47%	1,303,023	2,801,280	1,675,566	4,476,846
2027	July 1, 2026	61,083,782	18,304,333	42,779,449	29.97%	1,374,572	2,915,131	1,675,566	4,590,697
2028	July 1, 2027	63,653,252	21,280,626	42,372,626	33.43%	1,457,231	3,051,640	1,675,566	4,727,206
2029	July 1, 2028	66,302,509	24,459,307	41,843,202	36.89%	1,538,384	3,226,143	1,675,566	4,901,709
2030	July 1, 2029	68,997,730	27,854,138	41,143,592	40.37%	1,620,863	3,439,512	1,675,566	5,115,078
2031	July 1, 2030	71,787,988	31,479,818	40,308,170	43.85%	1,708,925	3,615,078	1,675,566	5,290,644
2032	July 1, 2031	74,653,049	35,352,044	39,301,005	47.36%	1,806,575	3,825,359	1,675,566	5,500,925
2033	July 1, 2032	77,550,849	39,487,581	38,063,268	50.92%	1,902,671	4,074,246	1,675,566	5,749,812
2034	July 1, 2033	80,545,528	43,904,335	36,641,193	54.51%	2,011,449	4,273,069	1,675,566	5,948,635
2035	July 1, 2034	83,642,597	48,621,428	35,021,169	58.13%	2,122,956	4,482,498	1,675,566	6,158,064
2036	July 1, 2035	86,904,827	53,659,283	33,245,544	61.74%	2,233,598	4,639,033	1,675,566	6,314,599
2037	July 1, 2036	90,352,015	59,039,713	31,312,302	65.34%	2,357,751	4,794,230	1,675,566	6,469,796
2038	July 1, 2037	94,027,868	64,786,012	29,241,856	68.90%	2,485,185	4,922,794	1,675,566	6,598,360
2039	July 1, 2038	97,953,292	70,923,059	27,030,233	72.40%	2,617,119	5,070,562	1,675,566	6,746,128
2040	July 1, 2039	102,050,024	77,477,425	24,572,599	75.92%	2,758,315	5,238,978	1,675,566	6,914,544
2041	July 1, 2040	106,387,569	84,477,488	21,910,081	79.41%	2,901,211	5,434,062	1,675,566	7,109,628
2042	July 1, 2041	111,003,118	91,953,556	19,049,562	82.84%	3,062,727	5,661,723	1,675,566	7,337,289
2043	July 1, 2042	115,829,764	99,937,996	15,891,768	86.28%	3,227,839	5,978,842	1,675,566	7,654,408
2044	July 1, 2043	120,878,963	108,465,378	12,413,585	89.73%	3,401,164	6,247,890	1,675,566	7,923,456
2045	July 1, 2044	126,262,030	117,572,622	8,689,408	93.12%	3,581,739	6,438,695	1,675,566	8,114,261
2046	July 1, 2045	131,881,297	127,299,159	4,582,138	96.53%	3,772,139	6,760,048	1,675,566	8,435,614
2047	July 1, 2046	137,787,842	137,687,100	100,742	99.93%	3,974,671	7,079,818	100,742	7,180,560
2048	July 1, 2047	144,052,789	147,153,934	(3,101,145)	102.15%	4,185,030	7,323,701	(3,101,145)	4,222,556
2049	July 1, 2048	150,696,635	153,955,552	(3,258,917)	102.16%	4,404,418	7,622,127	(3,258,917)	4,363,210



EXHIBIT D

PROJECTED CASH FLOWS (OPEN GROUP)

**Total Medical, Dental & Life Insurance - 7.00% discount rate and increasing at 3.00% 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 6.80% return	Liability (Asset) ("NOL") [I. - II.]					
2018	July 1, 2017	42,289,407	291,612	41,997,795	0.69%	919,439	1,759,835	80,000	1,839,835
2019	July 1, 2018	43,964,958	393,427	43,571,531	0.89%	855,234	2,055,896	1,329,708	3,385,604
2020	July 1, 2019	45,806,395	1,794,355	44,012,040	3.92%	915,987	2,071,229	1,369,599	3,440,828
2021	July 1, 2020	47,747,223	3,331,771	44,415,452	6.98%	972,996	2,155,817	1,410,687	3,566,504
2022	July 1, 2021	49,747,201	5,016,193	44,731,008	10.08%	1,032,480	2,286,994	1,453,008	3,740,002
2023	July 1, 2022	51,834,885	6,858,892	44,975,993	13.23%	1,094,897	2,398,279	1,496,598	3,894,877
2024	July 1, 2023	54,022,152	8,871,942	45,150,210	16.42%	1,162,323	2,509,217	1,541,496	4,050,713
2025	July 1, 2024	56,290,972	11,068,279	45,222,693	19.66%	1,227,911	2,641,677	1,587,741	4,229,418
2026	July 1, 2025	58,628,205	13,461,758	45,166,447	22.96%	1,303,023	2,801,280	1,635,373	4,436,653
2027	July 1, 2026	61,083,782	16,067,219	45,016,563	26.30%	1,374,572	2,915,131	1,684,434	4,599,565
2028	July 1, 2027	63,653,252	18,900,553	44,752,699	29.69%	1,457,231	3,051,640	1,734,967	4,786,607
2029	July 1, 2028	66,302,509	21,978,776	44,323,733	33.15%	1,538,384	3,226,143	1,787,016	5,013,159
2030	July 1, 2029	68,997,730	25,320,108	43,677,622	36.70%	1,620,863	3,439,512	1,840,626	5,280,138
2031	July 1, 2030	71,787,988	28,944,053	42,843,935	40.32%	1,708,925	3,615,078	1,895,845	5,510,923
2032	July 1, 2031	74,653,049	32,871,492	41,781,557	44.03%	1,806,575	3,825,359	1,952,720	5,778,079
2033	July 1, 2032	77,550,849	37,124,774	40,426,075	47.87%	1,902,671	4,074,246	2,011,302	6,085,548
2034	July 1, 2033	80,545,528	41,727,820	38,817,708	51.81%	2,011,449	4,273,069	2,071,641	6,344,710
2035	July 1, 2034	83,642,597	46,706,230	36,936,367	55.84%	2,122,956	4,482,498	2,133,790	6,616,288
2036	July 1, 2035	86,904,827	52,087,399	34,817,428	59.94%	2,233,598	4,639,033	2,197,804	6,836,837
2037	July 1, 2036	90,352,015	57,900,643	32,451,372	64.08%	2,357,751	4,794,230	2,263,738	7,057,968
2038	July 1, 2037	94,027,868	64,177,326	29,850,542	68.25%	2,485,185	4,922,794	2,331,650	7,254,444
2039	July 1, 2038	97,953,292	70,951,007	27,002,285	72.43%	2,617,119	5,070,562	2,401,600	7,472,162
2040	July 1, 2039	102,050,024	78,257,587	23,792,437	76.69%	2,758,315	5,238,978	2,473,648	7,712,626
2041	July 1, 2040	106,387,569	86,135,472	20,252,097	80.96%	2,901,211	5,434,062	2,547,857	7,981,919
2042	July 1, 2041	111,003,118	94,625,744	16,377,374	85.25%	3,062,727	5,661,723	2,624,293	8,286,016
2043	July 1, 2042	115,829,764	103,772,346	12,057,418	89.59%	3,227,839	5,978,842	2,703,022	8,681,864
2044	July 1, 2043	120,878,963	113,622,279	7,256,684	94.00%	3,401,164	6,247,890	2,784,113	9,032,003
2045	July 1, 2044	126,262,030	124,225,810	2,036,220	98.39%	3,581,739	6,438,695	2,036,220	8,474,915
2046	July 1, 2045	131,881,297	134,777,478	(2,896,181)	102.20%	3,772,139	6,760,048	(2,896,181)	3,863,867
2047	July 1, 2046	137,787,842	140,949,315	(3,161,473)	102.29%	3,974,671	7,079,818	(3,161,473)	3,918,345
2048	July 1, 2047	144,052,789	147,266,673	(3,213,884)	102.23%	4,185,030	7,323,701	(3,213,884)	4,109,817
2049	July 1, 2048	150,696,635	153,959,448	(3,262,813)	102.17%	4,404,418	7,622,127	(3,262,813)	4,359,314

EXHIBIT D

PROJECTED CASH FLOWS (OPEN GROUP)

Town of Norton

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

**Total Medical, Dental & Life Insurance - Funding Annual Service Cost - 3.50% discount rate**

Measurement Date	I. Total OPEB Liability	II. Service Cost	III. Employer Share of Premiums / Claims including "implicit cost"	IV. Funding Service Cost beyond claims	V. Total Funding Costs [III. + IV.]	VI. Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"	VII. Present Value at 3.00% of Funding Service Cost beyond claims	VIII. Present Value at 3.00% of Total Funding Costs [VI. + VII.]	IX. Fiduciary Net Position at Beginning of year	X. Net OPEB Liability (Asset) [I. - IX.]	XI. Present Value at 3.00% of Net OPEB Liability (Asset)
July 1, 2017	69,594,916	2,387,415	1,759,835	627,580	2,387,415	1,759,835	627,580	2,387,415	291,612	69,303,304	69,303,304
July 1, 2018	72,237,599	2,220,701	2,055,896	164,805	2,220,701	1,996,016	160,005	2,156,021	929,398	71,308,201	69,231,263
July 1, 2019	75,099,075	2,357,801	2,071,229	286,572	2,357,801	1,952,332	270,122	2,222,454	1,126,732	73,972,343	69,726,028
July 1, 2020	78,196,338	2,488,604	2,155,817	332,787	2,488,604	1,972,878	304,547	2,277,425	1,452,740	76,743,598	70,231,264
July 1, 2021	81,334,490	2,627,040	2,286,994	340,046	2,627,040	2,031,965	302,126	2,334,091	1,836,373	79,498,117	70,633,047
July 1, 2022	84,608,653	2,774,235	2,398,279	375,956	2,774,235	2,068,777	324,303	2,393,080	2,240,692	82,367,961	71,051,327
July 1, 2023	88,037,166	2,934,315	2,509,217	425,098	2,934,315	2,101,430	356,013	2,457,443	2,695,072	85,342,094	71,472,660
July 1, 2024	91,596,106	3,090,769	2,641,677	449,092	3,090,769	2,147,925	365,153	2,513,078	3,214,498	88,381,608	71,862,335
July 1, 2025	95,275,725	3,270,137	2,801,280	468,857	3,270,137	2,211,356	370,120	2,581,476	3,776,097	91,499,628	72,230,651
July 1, 2026	99,136,862	3,442,715	2,915,131	527,584	3,442,715	2,234,205	404,349	2,638,554	4,377,117	94,759,745	72,625,454
July 1, 2027	103,180,012	3,641,282	3,051,640	589,642	3,641,282	2,270,707	438,749	2,709,456	5,057,900	98,122,112	73,012,066
July 1, 2028	107,361,374	3,836,409	3,226,143	610,266	3,836,409	2,330,634	440,869	2,771,503	5,824,569	101,536,805	73,352,348
July 1, 2029	111,643,157	4,037,302	3,439,512	597,790	4,037,302	2,412,405	419,278	2,831,683	6,638,695	105,004,462	73,648,017
July 1, 2030	116,091,770	4,252,908	3,615,078	637,830	4,252,908	2,461,692	434,331	2,896,023	7,468,839	108,622,931	73,966,930
July 1, 2031	120,689,199	4,491,375	3,825,359	666,016	4,491,375	2,529,013	440,315	2,969,328	8,368,078	112,321,121	74,257,493
July 1, 2032	125,380,644	4,727,946	4,074,246	653,700	4,727,946	2,615,103	419,585	3,034,688	9,326,977	116,053,667	74,490,433
July 1, 2033	130,253,077	4,994,610	4,273,069	721,541	4,994,610	2,662,835	449,640	3,112,475	10,307,121	119,945,956	74,746,354
July 1, 2034	135,320,729	5,267,288	4,482,498	784,790	5,267,288	2,711,985	474,811	3,186,796	11,389,411	123,931,318	74,980,486
July 1, 2035	140,663,909	5,539,984	4,639,033	900,951	5,539,984	2,724,943	529,214	3,254,157	12,572,830	128,091,079	75,240,009
July 1, 2036	146,315,743	5,845,728	4,794,230	1,051,498	5,845,728	2,734,082	599,655	3,333,737	13,913,830	132,401,913	75,506,961
July 1, 2037	152,334,022	6,159,664	4,922,794	1,236,870	6,159,664	2,725,632	684,825	3,410,457	15,452,312	136,881,710	75,788,084
July 1, 2038	158,746,731	6,484,722	5,070,562	1,414,160	6,484,722	2,725,677	760,181	3,485,858	17,230,013	141,516,718	76,072,209
July 1, 2039	165,428,535	6,833,445	5,238,978	1,594,467	6,833,445	2,734,183	832,140	3,566,323	19,247,223	146,181,312	76,290,931
July 1, 2040	172,500,389	7,187,111	5,434,062	1,753,049	7,187,111	2,753,394	888,255	3,641,649	21,515,343	150,985,046	76,502,877
July 1, 2041	180,049,080	7,586,721	5,661,723	1,924,998	7,586,721	2,785,193	946,971	3,732,164	24,021,429	156,027,651	76,755,265
July 1, 2042	188,004,030	7,995,775	5,978,842	2,016,933	7,995,775	2,855,528	963,298	3,818,826	26,787,177	161,216,853	76,998,067
July 1, 2043	196,344,052	8,426,341	6,247,890	2,178,451	8,426,341	2,897,114	1,010,136	3,907,250	29,741,661	166,602,391	77,252,650
July 1, 2044	205,214,716	8,875,412	6,438,695	2,436,717	8,875,412	2,898,630	1,096,983	3,995,613	32,961,070	172,253,646	77,546,706
July 1, 2045	214,509,706	9,348,678	6,760,048	2,588,630	9,348,678	2,954,660	1,131,430	4,086,090	36,551,424	177,958,282	77,781,428
July 1, 2046	224,315,661	9,853,184	7,079,818	2,773,366	9,853,184	3,004,295	1,176,868	4,181,163	40,419,354	183,896,307	78,035,729
July 1, 2047	234,702,889	10,378,068	7,323,701	3,054,367	10,378,068	3,017,268	1,258,359	4,275,627	44,607,397	190,095,492	78,316,826

EXHIBIT D

PROJECTED CASH FLOWS (OPEN GROUP)

**Total Medical, Dental & Life Insurance - 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	416	69,594,916	69,594,916	1,759,835	1,759,835
July 1, 2018	416	72,237,599	70,133,591	2,055,896	1,996,016
July 1, 2019	416	75,099,075	70,788,081	2,071,229	1,952,332
July 1, 2020	417	78,196,338	71,560,727	2,155,817	1,972,878
July 1, 2021	419	81,334,490	72,264,641	2,286,994	2,031,965
July 1, 2022	422	84,608,653	72,984,167	2,398,279	2,068,777
July 1, 2023	425	88,037,166	73,729,741	2,509,217	2,101,430
July 1, 2024	428	91,596,106	74,476,016	2,641,677	2,147,925
July 1, 2025	431	95,275,725	75,211,537	2,801,280	2,211,356
July 1, 2026	436	99,136,862	75,980,150	2,915,131	2,234,205
July 1, 2027	438	103,180,012	76,775,619	3,051,640	2,270,707
July 1, 2028	441	107,361,374	77,560,141	3,226,143	2,330,634
July 1, 2029	445	111,643,157	78,304,264	3,439,512	2,412,405
July 1, 2030	449	116,091,770	79,052,846	3,615,078	2,461,692
July 1, 2031	453	120,689,199	79,789,778	3,825,359	2,529,013
July 1, 2032	457	125,380,644	80,477,064	4,074,246	2,615,103
July 1, 2033	459	130,253,077	81,169,411	4,273,069	2,662,835
July 1, 2034	460	135,320,729	81,871,267	4,482,498	2,711,985
July 1, 2035	462	140,663,909	82,625,222	4,639,033	2,724,943
July 1, 2036	462	146,315,743	83,441,824	4,794,230	2,734,082
July 1, 2037	461	152,334,022	84,343,655	4,922,794	2,725,632
July 1, 2038	460	158,746,731	85,334,190	5,070,562	2,725,677
July 1, 2039	459	165,428,535	86,335,912	5,238,978	2,734,183
July 1, 2040	459	172,500,389	87,404,524	5,434,062	2,753,394
July 1, 2041	459	180,049,080	88,572,217	5,661,723	2,785,193
July 1, 2042	458	188,004,030	89,791,772	5,978,842	2,855,528
July 1, 2043	457	196,344,052	91,043,702	6,247,890	2,897,114
July 1, 2044	457	205,214,716	92,385,419	6,438,695	2,898,630
July 1, 2045	457	214,509,706	93,757,206	6,760,048	2,954,660
July 1, 2046	457	224,315,661	95,187,535	7,079,818	3,004,295
July 1, 2047	457	234,702,889	96,694,483	7,323,701	3,017,268
July 1, 2048	457	245,713,224	98,282,131	7,622,127	3,048,753
July 1, 2049	457	257,355,679	99,940,741	7,949,779	3,087,194
July 1, 2050	457	269,691,314	101,680,704	8,324,261	3,138,465
July 1, 2051	457	282,680,314	103,473,687	8,686,836	3,179,772
July 1, 2052	457	296,469,941	105,360,495	9,099,073	3,233,659
July 1, 2053	458	310,881,481	107,264,191	9,503,116	3,278,883
July 1, 2054	458	326,289,680	109,301,475	9,909,873	3,319,638
July 1, 2055	458	342,619,491	111,428,819	10,372,452	3,373,393
July 1, 2056	458	360,082,243	113,697,245	10,778,001	3,403,192

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.