

# **Town of Norton Other Postemployment Benefits Plan**

## **GASB 74 & GASB 75 Actuarial Valuation**

With a Valuation Date of July 1, 2019

As of the Measurement Date:  
June 30, 2020

For the Reporting Date:  
June 30, 2020

Delivered October 20, 2020



## TABLE OF CONTENTS

	<u>PAGE</u>
<u>EXECUTIVE SUMMARY</u>	I
<u>PRINCIPAL RESULTS OF THE VALUATION</u>	1
<u>EXHIBITS</u>	
A        FINANCIAL STATEMENT DISCLOSURES	4
B        REQUIRED SUPPLEMENTARY INFORMATION	16
<u>APPENDIX</u>	
I        LIABILITIES, ASSETS, & CASH FLOWS	22
II       PLAN PROVISIONS	30
III      ACTUARIAL METHODS & ASSUMPTIONS	32
IV      PLAN DEMOGRAPHICS	39
V      OVERVIEW OF GASB 74 & 75	41
<u>GLOSSARY</u>	43



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October 20, 2020

***Personal and Confidential***

Mr. James Puello  
Town Accountant  
Town of Norton  
70 E. Main Street  
Norton, MA 02766

Dear Mr. Puello:

We have performed an actuarial valuation of the Town of Norton Other Postemployment Benefits Plan for the Reporting Date & fiscal year ending June 30, 2020 with a Measurement Date of June 30, 2020 and a Valuation Date of July 1, 2019. 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 years 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 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', written over a light blue horizontal line.

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

October 20, 2020

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, 2019 with a Measurement Date of June 30, 2020 for the Reporting Date & fiscal year ending June 30, 2020 in accordance with Government Account Standards Board Statement No. 74 & 75 and Actuarial Standards of Practice as issued by the American Academy of Actuaries. 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.

A handwritten signature in black ink, appearing to read 'P. Elmore', with a long horizontal flourish extending to the right.

---

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

## EXECUTIVE SUMMARY

### How did plan liabilities change from FY 19 to FY 20?

#### Plan Experience

For the year ending on the Measurement Date of June 30, 2020, experience was largely in line with expectation, with an experience gain of \$1,946,716 or 2.49% of the beginning Total OPEB Liability ("TOL"). This was mainly due to premiums for Medicare Supplement plans increasing 2% instead of the expected 10% increase. This was somewhat offset by an increase in both active employees and retirees.

#### Assumption Changes

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

- ✓ Based on recommendations by PERAC, the mortality table has been updated from the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 to the RP-2014 Mortality Table projected generationally with scale MP-2016 for males and females increasing the disclosed liability by \$4.1 million.
- ✓ The expected long-term medical trend has been updated to 4.50% decreasing the disclosed liability by \$8.0 million.
- ✓ Retirement rates for teachers have been updated increasing the disclosed liability by \$6.5 million.
- ✓ Based on recent research by the Society of Actuaries, we have updated the assumption for morbidity or age-related costs of medical care increasing the disclosed liability by \$7.5 million.
- ✓ Assumption changes caused Service Cost to increase by \$520 thousand.

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

#### Investment Experience

- ✓ During the period there was an investment loss of \$23,815 due to asset performance below the expected rate of return.

#### Changes in Benefits Terms

- ✓ To the best of our knowledge there have been no material changes in benefit terms that would impact the figures shown in this report.

## EXECUTIVE SUMMARY

### Recognition Period

- ✓ Changes in assumptions & plan experience are amortized into the net OPEB expense over 6.19 years.
- ✓ Differences between projected & actual earnings on OPEB plan investments are amortized into the net OPEB expense over 5.00 years
- ✓ Changes in benefit terms are to be recognized in full immediately

### Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

### Discount Rate Determinants

- ✓ Employer Current and Future Benefit Payments
- ✓ Municipal Bond Rate – The municipal bond rate was 2.66% as of June 30, 2020.
- ✓ Current Asset Level – The Town had \$623,109 of OPEB assets as of June 30, 2020.
- ✓ Funding Policy - The Town is expected to contribute \$100,000 annually.
- ✓ Investment Policy - The Town is expected to earn 6.72% on assets based on its investment policy.

### Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare supplement) plans - represent 70.32% 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 4.50% per year for Active plans and 4.50% per year for Medicare supplement plans.
- ✓ Discount Rate (3.25%) – Higher discount rates yield lower liabilities and vice versa
- ✓ Cost Sharing - Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance

## EXECUTIVE SUMMARY

### Recommended Trust Contributions

We recommend a contribution to an OPEB Trust of \$100,000 beyond pay-as-you-go costs until your Pension system is fully funded in Fiscal 2028. Beginning in Fiscal 2029, we suggest the Town consider reallocating the funds used to pay its pension amortization towards OPEB. We have provided a projection of the Plan's funded status on page 23.

### Medicare Buy-In

Recently, some of our clients have seen substantial cost savings by "buying into" Medicare for retirees who would otherwise be ineligible. To buy into Medicare the Town would need to pay the Medicare Part A premium and the Medicare Part A and B penalties. While the cost to buy into Medicare is significant, it is likely still far less than the cost of the claims that the associated retirees are expected to incur. Under Actuarial Standards of Practice for OPEB, we are required to reflect the projected higher healthcare costs that occur as retirees age. The Town currently has 14 retirees or covered spouses who are over the age of 65 and are enrolled in Active medical plans rather than Medicare Supplement (Senior) plans. You may wish to review their Medicare eligibility to see if they are already eligible for Medicare or if a "buy-in" is appropriate as this could yield a reduction in your OPEB annual costs and disclosed liabilities. If you are in this situation, we encourage you to talk to your healthcare consultant to see if this might be viable.

<b>I. Number of Retirees and Spouses Over 65 in Active Plans</b>	14
<b>II. Current Liability for Retirees and Spouses Over 65 in Active Plans</b>	7,787,000
<b>III. Potential Liability in Medicare Supplement Plan*</b>	1,054,000
<b>IV. Potential Reduction in Liability [II. - III.]</b>	6,733,000

**\*Does not include Medicare Part A or B penalties nor the Medicare Part B Premiums paid by the retiree**

## EXECUTIVE SUMMARY

### Key Plan Metrics

While an actuarial valuation under GASB 74/75 can be very complex with many variables, we find it helpful to look at several key metrics (shown below) to better allow you to manage your plan.

Representative Plan Statistics		
Valuation Date	July 1, 2019	July 1, 2017
Measurement Date & Period Ending	June 30, 2020	June 30, 2019
Reporting Date/Fiscal Year End	June 30, 2020	June 30, 2019
Total OPEB Liability	88,999,820	78,094,481
Per Eligible Active Plan Participant	89,537	84,825
Per Retiree/Spouse Plan Participant	111,661	98,009
Total Annual Service Cost (Annual Benefit Accrual)	2,696,277	2,527,204
Per Eligible Active Plan Participant	5,874	5,744
Expected Employer Share of Retiree Costs	2,479,749	2,071,229
Per Retiree/Spouse Plan Participant	5,780	4,979
Net OPEB Liability as a % of Covered Payroll	273.20%	248.70%



## EXECUTIVE SUMMARY

### 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	Total OPEB Liability	Present Value at 3.00% of Total OPEB Liability	Employer Share of Premiums/Claims Including "Implicit Cost"	Present Value at 3.00% of Employer Share of Premiums / Claims Including "Implicit Cost"
June 30, 2020	429	88,999,820	88,999,820	2,479,749	2,479,749
June 30, 2025	463	105,580,084	91,074,308	3,164,810	2,729,993
June 30, 2030	482	123,249,702	91,709,353	4,094,159	3,046,439
June 30, 2035	484	140,826,786	90,391,355	5,005,997	3,213,159
June 30, 2040	471	161,865,082	89,620,771	5,516,880	3,054,563
June 30, 2045	453	188,777,522	90,161,196	6,306,385	3,011,965
June 30, 2050	439	224,442,700	92,467,421	7,144,398	2,943,397

## PRINCIPAL RESULTS OF THE VALUATION

### Town of Norton

### Assuming Funding - 3.25% discount rate

### Comparison of Plan Liabilities to Prior Valuation

Valuation Date	July 1, 2019	July 1, 2017
For the Measurement Period ending on the Measurement Date of:	June 30, 2020	June 30, 2019
For the Reporting Period & Fiscal Year ending on:	June 30, 2020	June 30, 2019
I. Total OPEB Liability		
A. Actives	41,097,424	37,322,847
B. Retirees/Disabled	<u>47,902,396</u>	<u>40,771,634</u>
C. Total	88,999,820	78,094,481
II. Fiduciary Net Position [Plan Assets]	623,109	514,228
III. Net OPEB Liability (Asset) [I. - II.]	88,376,711	77,580,253
IV. Funded Ratio [II. / I.]	0.70%	0.66%
V. Number of Eligible Participants		
A. Actives	459	440
B. Retirees/Disabled & Dependents	<u>429</u>	<u>416</u>
C. Total	888	856
VI. Service Cost	2,696,277	2,527,204
VII. Financial Statement Expense	8,239,186	6,834,995
VIII. Employer Contribution to the OPEB Trust	(95,000)	(90,000)
IX. Deferred Inflow of Resources	(1,634,831)	(3,809)
X. Deferred Outflow of Resources	13,632,129	6,869,086
XI. Money Weighted Rate of Return	2.47%	6.92%
XII. 20-year Municipal Bond Rate (SAPIHG)	2.66%	2.79%
XIII. Expected Long Term Rate of Return (Net of Expense)	6.72%	6.80%
XIV. Crossover Year	Immediate	Immediate
XV. Discount Rate	3.25%	3.25%

## PRINCIPAL RESULTS OF THE VALUATION

### **Town of Norton Plan Liabilities as of the June 30, 2020 Measurement Date**

	Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Total OPEB Liability							
A. Actives	1,949,929	28,823,540	5,048,873	4,161,291	186,448	927,343	41,097,424
B. Retirees/Disabled	<u>43,836,341</u>	<u>193,098</u>	<u>2,267,565</u>	<u>821,872</u>	<u>0</u>	<u>783,520</u>	<u>47,902,396</u>
C. Total	45,786,270	29,016,638	7,316,438	4,983,163	186,448	1,710,863	88,999,820
II. Fiduciary Net Position [Plan Assets]	320,562	203,152	51,224	34,888	1,305	11,978	623,109
III. Net OPEB Liability (Asset) [I. - II.]	45,465,708	28,813,486	7,265,214	4,948,275	185,143	1,698,885	88,376,711
IV. Number of Eligible Participants							
A. Actives	38	329	40	36	3	13	459
B. Retirees/Disabled	<u>417</u>	<u>1</u>	<u>5</u>	<u>2</u>	<u>0</u>	<u>4</u>	<u>429</u>
C. Total	455	330	45	38	3	17	888
<b>For the Reporting Date and Fiscal Year Ending June 30, 2020</b>							
V. Service Cost	205,427	1,824,797	316,968	279,986	14,644	54,455	2,696,277
VI. Financial Statement Expense	3,009,135	3,669,563	777,434	595,425	26,585	161,044	8,239,186
VII. Employer Share of Costs	(2,151,383)	(154,145)	(70,490)	(52,424)	(874)	(50,433)	(2,479,749)
VIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(46,605)	(32,736)	(8,062)	(5,557)	(214)	(1,826)	(95,000)
IX. Total Employer Contribution [VII. + VIII.]	(2,197,988)	(186,881)	(78,552)	(57,981)	(1,088)	(52,259)	(2,574,749)

## PRINCIPAL RESULTS OF THE VALUATION

### Town of Norton

Assuming Funding - 3.25% discount rate

For the Period Ending on the June 30, 2020 Measurement Date

	Actives			Retirees/Disabled			Grand Total
	Under Age 65	Age 65+	Actives Total	Under Age 65	Age 65 +	Retirees Total	
<b>Present Value of Future Benefits</b>							
A. Participants	18,493,845	25,454,281	43,948,126	5,748,639	35,132,566	40,881,205	84,829,331
B. Spouses	<u>11,509,823</u>	<u>17,867,465</u>	<u>29,377,288</u>	<u>3,451,799</u>	<u>3,569,392</u>	<u>7,021,191</u>	<u>36,398,479</u>
C. Total	30,003,668	43,321,746	73,325,414	9,200,438	38,701,958	47,902,396	121,227,810
<b>Total OPEB Liability</b>							
A. Participants	10,614,065	14,009,195	24,623,260	5,748,639	35,132,566	40,881,205	65,504,465
B. Spouses	<u>6,604,786</u>	<u>9,869,378</u>	<u>16,474,164</u>	<u>3,451,799</u>	<u>3,569,392</u>	<u>7,021,191</u>	<u>23,495,355</u>
C. Total	17,218,851	23,878,573	41,097,424	9,200,438	38,701,958	47,902,396	88,999,820
<b>Service Cost</b>							
A. Participants	620,117	1,003,761	1,623,878	0	0	0	1,623,878
B. Spouses	<u>378,245</u>	<u>694,154</u>	<u>1,072,399</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,072,399</u>
C. Total	998,362	1,697,915	2,696,277	0	0	0	2,696,277

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2020 Measurement Date)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require the following disclosures in the financial statements:

#### 1. OPEB Expense Development

<b>Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2020</b>	
<b>Description</b>	<b>Amount</b>
I. Service Cost	2,696,277
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	2,585,726
III. Deferred (Inflows)/Outflows from Plan Experience*	336,111
IV. Deferred (Inflows)/Outflows from Changes of Assumptions*	2,655,206
V. Projected Earnings on OPEB Plan Investments	(37,696)
VI. Deferred (Inflows)/Outflows from Earnings on Plan Investments**	3,562
VII. Financial Statement Expense Prior to Plan Design Changes [I. + II. + III. + IV. + V. + VI.]	8,239,186
VIII. Expense Related to Change in Benefit Terms***	0
IX. Financial Statement Expense [VII. + VIII.]	8,239,186

\* Amortized over 6.19 years

\*\* Amortized over 5.00 years

\*\*\* Recognized Immediately

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2020 Measurement Date)

#### 2. 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 for June 30, 2019</b>	78,094,481	514,228	77,580,253
<b>II. Prior Period Adjustment</b>	0	0	0
<b>III. Balances for June 30, 2019 with Adjustment [I. + II.]</b>	78,094,481	514,228	77,580,253
<b>Changes for the year:</b>			
IV. Service Cost	2,696,277	0	2,696,277
V. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	2,585,726	0	2,585,726
VI. Changes in Benefit Terms *	0	0	0
VII. Change in Assumptions **	10,049,801	0	10,049,801
VIII. Differences Between Actual and Expected Experience **	(1,946,716)	0	(1,946,716)
IX. Net Investment Income	0	13,881	(13,881)
X. Employer Contributions to Trust	0	2,574,749	(2,574,749)
XI. Benefit Payments Withdrawn from Trust	0	(2,479,749)	2,479,749
XII. Benefit Payments Excluding Implicit Cost	(1,994,060)	0	(1,994,060)
XIII. Implicit Cost Amount	(485,689)	0	(485,689)
XIV. Total Benefit Payments Including Implicit Cost [XII. + XIII.]	(2,479,749)	0	(2,479,749)
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>	10,905,339	108,881	10,796,458
<b>XVIII. Balances at June 30, 2020 [III.+XVII.]</b>	88,999,820	623,109	88,376,711

\* Recognized Immediately

\*\* Amortized over 6.19 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2020 Measurement Date)

3. Changes in Net OPEB Expense

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of the Effects of Differences Between Expected & Actual Experience									
Fiscal	Differences Between Actual & Expected Experience	Recognition Period (Years)	Remaining Balance	2020	2021	2022	2023	2024	2025
2017									
2018	3,558,805	5.47	1,606,993	650,604	650,604	650,604	305,785		
2019	0	5.47	0	0	0	0	0	0	
2020	(1,946,716)	6.19	(1,632,223)	(314,493)	(314,493)	(314,493)	(314,493)	(314,493)	(314,493)
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			(25,230)						
Net increase (decrease) in OPEB Expense				336,111	336,111	336,111	(8,708)	(314,493)	(314,493)

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of the Effects of Changes in Assumptions									
Fiscal	Differences from Changes in Actuarial Assumptions	Recognition Period (years)	Remaining Balance	2020	2021	2022	2023	2024	2025
2017									
2018	0	5.47	0	0	0	0	0		
2019	5,643,141	5.47	3,579,837	1,031,652	1,031,652	1,031,652	1,031,652	484,881	
2020	10,049,801	6.19	8,426,247	1,623,554	1,623,554	1,623,554	1,623,554	1,623,554	1,623,554
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			12,006,084						
Net increase (decrease) in OPEB Expense				2,655,206	2,655,206	2,655,206	2,655,206	2,108,435	1,623,554

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2020 Measurement Date)

3. Changes in 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	Differences Between Actual & Expected Earnings	Recognition Period (years)	Remaining Balance	2020	2021	2022	2023	2024	2025
2017									
2018	(4,965)	5.00	(1,986)	(993)	(993)	(993)			
2019	(1,038)	5.00	(622)	(208)	(208)	(208)	(206)		
2020	23,815	5.00	19,052	4,763	4,763	4,763	4,763	4,763	
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			16,444						
Net increase (decrease) in OPEB Expense				3,562	3,562	3,562	4,557	4,763	0



EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES  
(As of the June 30, 2020 Measurement Date)

3. Changes in Net OPEB Expense (Continued)

Statement of Outflows & Inflows Arising from Current & Prior Reporting Periods for the Measurement Period Ending on June 30, 2020 to be Reported for the Fiscal Year Ending June 30, 2020			
	Deferred Outflows of Resources	Deferred Inflows of Resources	Total
I. Contributions made subsequent to the Measurement Date	0	0	0
II. Differences Between Actual & Expected Experience	1,606,993	(1,632,223)	(25,230)
III. Changes of Assumptions	12,006,084	0	12,006,084
IV. Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	<u>19,052</u>	<u>(2,608)</u>	<u>16,444</u>
V. Total [I.+II.+III.+IV.]	13,632,129	(1,634,831)	11,997,298

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2020 Measurement Date)

#### 3. Changes in Net OPEB Expense (Continued)

##### **Annual Amortization of Deferred (Inflows)/Outflows**

The balance of deferred (inflows)/outflows as of June 30, 2020 will be recognized in future years as shown below.

##### **Year ending June 30:**

2021	2,994,879
2022	2,994,879
2023	2,651,055
2024	1,798,705
2025	1,309,061
Thereafter	248,719

#### 4. Discount Rate

The discount rate used to measure the Total OPEB liability was 3.25% as of June 30, 2020 and 3.25% as of June 30, 2019. The projection of cash flows used to determine the discount rate assumed that contributions will be made in accordance with the Town's funding policy. Based on these assumptions, the OPEB Plan's Fiduciary Net Position is projected to be insufficient to make all projected benefit payments to current plan members. Therefore, the long-term expected rate of return on the OPEB Plan assets is applied to the projected benefits payments which the Fiduciary Net Position is expected to be sufficient to cover and the Municipal Bond Rate is applied thereafter. The Municipal Bond Rate is based on the S&P Municipal Bond 20 - Year High Grade Index ("SAPIHG"), which was 2.66% as of June 30, 2020. The S&P Municipal Bond 20 - Year High Grade Index is the index rate for 20 year, tax exempt general obligation municipal bonds with an average rate of AA/Aa or higher.

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2020 Measurement Date)

#### 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 June 30, 2020 Measurement Date, total Town premiums plus implicit costs for the retiree medical program were \$2,479,749. The Town also contributed \$95,000 to an OPEB Trust for a total contribution during the measurement period of \$2,574,749 to be reported on the financial statement for the fiscal year ending June 30, 2020.

#### 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	25.00%	Domestic Equity - Large Cap	4.80%
Domestic Equity - Small/Mid Cap	17.75%	Domestic Equity - Small/Mid Cap	5.29%
International Equity - Developed Market	16.50%	International Equity - Developed Market	5.45%
International Equity-Emerging Market	7.50%	International Equity-Emerging Market	6.42%
Domestic Fixed Income	26.50%	Domestic Fixed Income	2.05%
International Fixed Income	0.00%	International Fixed Income	3.00%
Alternatives	6.25%	Alternatives	6.50%
Real Estate	0.00%	Real Estate	6.25%
Cash & Cash Equivalents	0.50%	Cash & Cash Equivalents	0.00%
Total	100.00%		
		I. Real Rate of Return**	4.47%
		II. Inflation Assumption	2.50%
		III. Total Nominal Return [I. + II.]	6.97%
		IV. Investment Expense	0.25%
		V. Net Investment Return [III.-IV.]	6.72%

\* Based on 2019 Horizon Survey of Capital Market Assumptions

\*\* Geometric Mean

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2020 Measurement Date)

#### 7. Schedule of The Town's Contributions

For the Fiscal Year Ending	Actuarial Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
June 30, 2020	7,205,562	(2,574,749)	4,630,813	32,353,040	7.96%
June 30, 2019	6,485,617	(2,161,229)	4,324,388	31,198,445	6.93%
June 30, 2018	5,694,580	(1,839,835)	3,854,745	30,289,752	6.07%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2020 Measurement Date)

8. Effect of 1% Change in Healthcare Trend

<u>Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2020 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Trend Rate</u>	<u>1% Increase</u>
I. Total OPEB Liability	75,005,177	88,999,820	107,234,750
II. Fiduciary Net Position	<u>623,109</u>	<u>623,109</u>	<u>623,109</u>
III. Net OPEB Liability (Asset) [I.-II.]	74,382,068	88,376,711	106,611,641
IV. Service Cost	2,011,932	2,696,277	3,686,086

9. Effect of 1% Change in Discount Rates

<u>Impact of a 1% Change in the Discount Rate as of the June 30, 2020 Measurement Date</u>			
	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
I. Total OPEB Liability	105,183,561	88,999,820	76,304,911
II. Fiduciary Net Position	<u>623,109</u>	<u>623,109</u>	<u>623,109</u>
III. Net OPEB Liability (Asset) [I.-II.]	104,560,452	88,376,711	75,681,802
IV. Service Cost	3,633,955	2,696,277	2,024,348

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2020 Measurement Date)

#### 10. Money Weighted Rate of Return

	Plan Investments / Net External Cash Flows	Periods Invested	Period Weight
I. Beginning value - June 30, 2019	514,228	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	0	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	95,000	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	0	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
<u>June</u>	<u>0</u>	0	0.0000
II. Total net external cash flow	95,000		
III. Earnings and increase in fair value	13,881		
IV. Ending value - June 30, 2020 [I.+II.+III.]	623,109		
Money Weighted Rate of Return	2.47%		
Asset Value - June 30, 2020	623,109		

**EXHIBIT A**  
**FINANCIAL STATEMENT DISCLOSURES**  
(As of the June 30, 2020 Measurement Date)

**11. OPEB Liability, OPEB Expense**

	Fiscal Year Ending June 30, 2020						
	Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Total OPEB Liability as of June 30, 2020	45,786,270	29,016,638	7,316,438	4,983,163	186,448	1,710,863	88,999,820
II. Fiduciary Net Position as of June 30, 2020	320,562	203,152	51,224	34,888	1,305	11,978	623,109
III. Net OPEB Liability (Asset) as of June 30, 2020 [I. - II.]	45,465,708	28,813,486	7,265,214	4,948,275	185,143	1,698,885	88,376,711
IV. Service Cost	205,427	1,824,797	316,968	279,986	14,644	54,455	2,696,277
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	1,282,309	880,686	217,371	149,872	5,746	49,742	2,585,726
VI. Projected Earnings on OPEB Plan Investments	(19,328)	(12,341)	(3,106)	(2,118)	(79)	(724)	(37,696)
VII. Net Recognition of Deferred (Inflows)/Outflows	1,540,727	976,421	246,201	167,685	6,274	57,571	2,994,879
VIII. Expense Related to Change in Benefit Terms	0	0	0	0	0	0	0
IX. Financial Statement Expense [IV. + V. + VII. + VIII.]	3,009,135	3,669,563	777,434	595,425	26,585	161,044	8,239,186
X. Employer Share of Costs	(2,151,383)	(154,145)	(70,490)	(52,424)	(874)	(50,433)	(2,479,749)
XI. Employer (Payments) Withdrawals to/from OPEB Trust	(46,605)	(32,736)	(8,062)	(5,557)	(214)	(1,826)	(95,000)
XII. Total Employer Contribution [X. + XI.]	(2,197,988)	(186,881)	(78,552)	(57,981)	(1,088)	(52,259)	(2,574,749)
XIII. Net OPEB Expense [IX. + XII.]	811,147	3,482,682	698,882	537,444	25,497	108,785	5,664,437

## EXHIBIT A

### FINANCIAL STATEMENT DISCLOSURES

(As of the June 30, 2020 Measurement Date)

#### 12. OPEB Liability, OPEB Expense and Deferred Inflow/Outflow

Valuation Date	July 1, 2019
For the Measurement Period ending on the Measurement Date of:	June 30, 2020
For the Reporting Period & Fiscal Year ending on:	June 30, 2020
<b>Source of Deferred Inflow/Outflow</b>	
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	(25,230)
II. Deferred (Inflow)/Outflow from Investment Experience	16,444
III. Deferred (Inflow)/Outflow from Changes in Assumptions	12,006,084
<b>Change in Deferred Inflow/Outflow</b>	
I. Deferred Outflow at the beginning of the period	6,869,086
II. Deferred Outflow created during the period	10,073,616
III. Deferred Outflow recognized during the period	3,310,573
IV. Change in Deferred Outflow (II. - III. )	6,763,043
V. Deferred Outflow at end of the period (I. + IV. )	13,632,129
VI. Deferred Inflow at the beginning of the period	(3,809)
VII. Deferred Inflow created during the period	(1,946,716)
VIII. Deferred Inflow recognized during the period	(315,694)
IX. Change in Deferred Inflow (VII. - VIII. )	(1,631,022)
X. Deferred Inflow at end of the period (VI. + IX. )	(1,634,831)
<b>Net OPEB Liability</b>	
I. Net OPEB Liability at beginning of period	77,580,253
II. Service Cost	2,696,277
III. Interest on Total OPEB Liability, Service Cost, and Payments	2,585,726
IV. Projected Investment Income	(37,696)
V. Total Employer Contributions	(2,574,749)
VI. Expense Related to Change in Benefit Terms	0
VII. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + IV. + V. + VI. )	2,669,558
VIII. Deferred Outflow created during the period	10,073,616
IX. Deferred Inflow created during the period	(1,946,716)
X. Net OPEB Liability at end of period (I. + VII. + VIII. + IX. )	88,376,711
<b>Net OPEB Expense</b>	
I. Service Cost	2,696,277
II. Interest on Total OPEB Liability, Service Cost, and Payments	2,585,726
III. Projected Investment Income	(37,696)
IV. Recognition of Deferred (Inflow)/Outflow	2,994,879
V. Expense Related to Change in Benefit Terms	0
VI. Financial Statement Expense (I. + II. + III. + IV. + V. )	8,239,186
VII. Benefit Payments	(2,479,749)
VIII. Contributions to Trust	(95,000)
IX. Total Employer Payments (VII. + VIII. )	(2,574,749)
X. Total Net OPEB Expense under GASB 75 (VI. + IX. )	5,664,437



## EXHIBIT B

### REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2020 Measurement Date)

The Town's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which is composed of the service cost and an amortization of the unfunded liability. We have used a 30 year flat dollar amortization of the Town's unfunded liability for the purpose of calculating ADC. The following table shows the components of the Town's annual ADC and the amount actually contributed to the plan:

<b>Actuarially Determined Contribution - Deficiency / (Excess)</b>			
	<b>For the Fiscal Year Ending:</b>		
	<b><u>June 30, 2020</u></b>	<b><u>June 30, 2019</u></b>	<b><u>June 30, 2018</u></b>
I. Service Cost	2,696,277	2,527,204	2,387,415
II. 30 Year Level Dollar Amortization of NOL	<u>4,509,285</u>	<u>3,958,413</u>	<u>3,307,165</u>
III. Actuarial Determined Contribution [I. + II.]	7,205,562	6,485,617	5,694,580
IV. Contributions in Relation to the Actuarially Determined Contribution	<u>(2,574,749)</u>	<u>(2,161,229)</u>	<u>(1,839,835)</u>
V. Contribution Deficiency / (Excess) [III. + IV.]	<u>4,630,813</u>	<u>4,324,388</u>	<u>3,854,745</u>
Covered Employee Payroll	32,353,040	31,198,445	30,289,752
Contributions as a % of Covered Employee Payroll	7.96%	6.93%	6.07%
Discount Rate	3.25%	3.25%	3.50%
Money Weighted Rate of Return	2.47%	6.92%	4..74%

## EXHIBIT B

### REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2020 Measurement Date)

Schedule of Changes in the Town's Net OPEB Liability and Related Ratios			
Valuation Date	July 1, 2019	July 1, 2017	July 1, 2017
GASB 75 Measurement Date	June 30, 2020	June 30, 2019	June 30, 2018
For the Reporting Period & Fiscal Year Ending on:	June 30, 2020	June 30, 2019	June 30, 2018
<b>Total OPEB Liability</b>	88,999,820	78,094,481	69,594,916
I. Service Cost	2,696,277	2,527,204	2,387,415
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	2,585,726	2,656,499	2,263,117
III. Changes in Benefit Terms	0	0	0
IV. Difference Between Expected & Actual Plan Experience	(1,946,716)	0	3,558,805
V. Changes of Assumptions	10,049,801	5,643,141	0
VI. Benefit Payments Excluding Implicit Cost	(1,994,060)	(1,822,188)	N/A
VII. Implicit Cost Amount	(485,689)	(249,041)	N/A
VIII. Total Benefit Payments Including Implicit Cost [VI.+VII.]	(2,479,749)	(2,071,229)	(1,759,835)
IX. Net Change in OPEB Liability [I.+II.+III.+IV.+V.+VIII.]	10,905,339	8,755,615	6,449,502
X. Total OPEB Liability - Beginning of Period	78,094,481	69,594,916	62,533,766
XI. Prior Period Adjustment	0	(256,050)	611,648
XII. Total OPEB Liability - Beginning of Period with Adjustment	78,094,481	69,338,866	63,145,414
XIII. Total OPEB Liability - End of Period [IX.+XII.]	88,999,820	78,094,481	69,594,916
<b>Plan Fiduciary Net Position</b>	623,109	514,228	291,612
XIV. Earning from Plan Investments	13,881	30,801	20,627
XV. Employer Contribution to Trust	2,574,749	2,161,229	1,839,835
XVI. Benefit Payments from Trust, Including Refunds of Member Contributions	(2,479,749)	(2,071,229)	(1,759,835)
XVII. Administrative Expense	0	0	0
XVIII. Other	0	0	0
XIX. Net Change in Plan Fiduciary Net Position [XIV.+XV.+XVI.+XVII.+XVIII.]	108,881	120,801	100,627
XX. Plan Fiduciary Net Position - Beginning of Period	514,228	291,612	190,985
XXI. Prior Period Adjustment	0	101,815	0
XXII. Plan Fiduciary Net Position - Beginning of Period with Adjustment	514,228	393,427	190,985
XXIII. Plan Fiduciary Net Position - End of Period [XIX.+XXII.]	623,109	514,228	291,612
XXIV. Net OPEB Liability [XIII.-XXIII.]	88,376,711	77,580,253	69,303,304
XXV. Plan Fiduciary Net Position as % of Total OPEB Liability [XXIII. / XIII.]	0.70%	0.66%	0.42%
XXVI. Covered Employee Payroll	32,353,040	31,198,445	30,289,752
XXVII. Plan NOL as % of Covered Employee Payroll [XXIV. / XXVI.]	273.16%	248.67%	228.80%
Single Discount Rate to calculate Plan Liabilities	3.25%	3.25%	3.50%

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2020 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of July 1, 2019.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, June 30, 2020.

Actuarial Assumptions:

Investment Rate of Return:	6.72%, net of OPEB plan investment expense, including inflation.
Municipal Bond Rate	2.66% as of June 30, 2020 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
Single Equivalent Discount Rate:	3.25%, net of OPEB plan investment expense, including inflation.
Inflation:	2.50% as of June 30, 2020 and for future periods
Salary Increases:	3.00% annually as of June 30, 2020 and for future periods
Cost of Living Adjustment:	Not Applicable

## EXHIBIT B

### REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2020 Measurement Date)

Pre-Retirement Mortality:	General: RP-2014 Mortality Table for Blue Collar Employees projected generationally with scale MP-2016 for males and females, set forward 1 year for females Teachers: RP-2014 Mortality Table for White Collar Employees projected generationally with scale MP-2016 for males and females
Post-Retirement Mortality:	General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year for females Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females
Disabled Mortality:	General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2020 Measurement Date)

Plan Membership

At July 1, 2019, OPEB plan membership consisted of the following:

Inactive employees or beneficiaries currently receiving benefits:	429
Active Employees:	<u>459</u>
Total:	888

Events Subsequent to the Measurement Date

To the best of our knowledge there were no material events subsequent to the Measurement Date that would impact the figures shown in this report.

Changes in Assumptions: From June 30, 2019 to June 30, 2020

- ✓ Based on recommendations by PERAC, the mortality table has been updated from the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 to the RP-2014 Mortality Table projected generationally with scale MP-2016 for males and females
- ✓ The expected long-term medical trend has been updated to 4.50%
- ✓ Retirement rates for teachers have been updated
- ✓ Based on recent research by the Society of Actuaries, we have updated the assumption for morbidity or age-related costs of medical care

Contributions/Withdrawals:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town contributed beyond the pay-as-you-go cost \$95,000 for the period ending on the June 30, 2020 Measurement Date. For the year ending on the June 30, 2020 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$2,479,749. \$485,689 of the \$2,479,749 represents implicit cost.

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2020 Measurement Date)

Census Data Manipulation:

In the absence of data, the following was assumed:

Spouse Sex:	Male participants had female spouses and vice versa.
Spouse Age:	Male spouses were three years older than female spouses and same sex spouses were the same age.
Hire Age:	Participants who were not on the previous valuation were hired halfway between last valuation and the current valuation. If we did not have census data related to the last valuation, the participants were assumed to have been hired at age forty.
Retiree Age:	Retirees had the same birth date as they had the prior valuation. If we did not have census data related to the last valuation, retirees who were enrolled in Active plans were assumed to be age sixty-two and retirees who were enrolled in Medicare Supplement plans were assumed to be age seventy-two. Those not enrolled in a medical plan were assumed to be sixty-seven.
School Demographics:	Two thirds of school participants were teachers.
Other Material Changes:	No other data changes were deemed to be material.

## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### CURRENT FUNDING POLICY (OPEN GROUP)

#### Funding - 3.25% discount rate

For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with an expected 6.72% return	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Benefit Payments (With Implicit Cost)	VII. Trust Contributions Beyond Pay-as-you-go	VIII. Gross Trust Contributions [VI. + VII.]	IX. Benefit Payments Reimbursed from the Trust	X. Administrative & Investment Expenses Reimbursed from the Trust	XI. Total Employer Payments Less Reimbursements [VIII. - IX. - X.]
2020	June 30, 2020	88,999,820	623,109	88,376,711	0.70%	2,696,277	2,479,749	95,000	2,574,749	2,479,749	0	95,000
2021	June 30, 2021	92,100,986	768,287	91,332,699	0.83%	2,779,823	2,619,273	100,000	2,719,273	2,619,273	0	100,000
2022	June 30, 2022	95,382,690	923,221	94,459,469	0.97%	2,869,788	2,761,299	100,000	2,861,299	2,761,299	0	100,000
2023	June 30, 2023	98,733,589	1,088,567	97,645,022	1.10%	2,975,032	2,840,082	100,000	2,940,082	2,840,082	0	100,000
2024	June 30, 2024	102,146,685	1,265,024	100,881,661	1.24%	3,077,577	2,979,318	100,000	3,079,318	2,979,318	0	100,000
2025	June 30, 2025	105,580,084	1,453,339	104,126,745	1.38%	3,202,179	3,164,810	100,000	3,264,810	3,164,810	0	100,000
2026	June 30, 2026	109,099,572	1,654,309	107,445,263	1.52%	3,318,627	3,297,331	100,000	3,397,331	3,297,331	0	100,000
2027	June 30, 2027	112,625,691	1,868,784	110,756,907	1.66%	3,445,103	3,487,206	100,000	3,587,206	3,487,206	0	100,000
2028	June 30, 2028	116,170,422	2,097,672	114,072,750	1.81%	3,578,171	3,690,361	100,000	3,790,361	3,690,361	0	100,000
2029	June 30, 2029	119,666,803	2,341,941	117,324,862	1.96%	3,720,615	3,924,918	100,000	4,024,918	3,924,918	0	100,000
2030	June 30, 2030	123,249,702	2,602,625	120,647,077	2.11%	3,858,792	4,094,159	100,000	4,194,159	4,094,159	0	100,000
2031	June 30, 2031	126,690,093	2,880,827	123,809,266	2.27%	4,009,913	4,327,501	100,000	4,427,501	4,327,501	0	100,000
2032	June 30, 2032	130,210,886	3,177,724	127,033,162	2.44%	4,156,541	4,561,941	100,000	4,661,941	4,561,941	0	100,000
2033	June 30, 2033	133,679,769	3,494,572	130,185,197	2.61%	4,322,349	4,720,473	100,000	4,820,473	4,720,473	0	100,000
2034	June 30, 2034	137,191,008	3,832,713	133,358,295	2.79%	4,494,695	4,874,720	100,000	4,974,720	4,874,720	0	100,000
2035	June 30, 2035	140,826,786	4,193,577	136,633,209	2.98%	4,657,176	5,005,997	100,000	5,105,997	5,005,997	0	100,000
2036	June 30, 2036	144,908,504	4,578,691	140,329,813	3.16%	4,848,210	5,051,392	100,000	5,151,392	5,051,392	0	100,000
2037	June 30, 2037	148,929,167	4,989,684	143,939,483	3.35%	5,044,333	5,136,490	100,000	5,236,490	5,136,490	0	100,000
2038	June 30, 2038	153,164,492	5,428,296	147,736,196	3.54%	5,238,828	5,296,718	100,000	5,396,718	5,296,718	0	100,000
2039	June 30, 2039	157,451,718	5,896,383	151,555,335	3.74%	5,460,548	5,419,037	100,000	5,519,037	5,419,037	0	100,000
2040	June 30, 2040	161,865,082	6,395,925	155,469,157	3.95%	5,673,457	5,516,880	100,000	5,616,880	5,516,880	0	100,000
2041	June 30, 2041	166,498,834	6,929,037	159,569,797	4.16%	5,905,464	5,684,790	100,000	5,784,790	5,684,790	0	100,000
2042	June 30, 2042	171,827,834	7,497,974	164,329,860	4.36%	6,155,864	5,863,360	100,000	5,963,360	5,863,360	0	100,000
2043	June 30, 2043	177,159,340	8,105,143	169,054,197	4.58%	6,419,632	6,005,676	100,000	6,105,676	6,005,676	0	100,000
2044	June 30, 2044	182,831,532	8,753,114	174,078,418	4.79%	6,685,267	6,083,112	100,000	6,183,112	6,083,112	0	100,000
2045	June 30, 2045	188,777,522	9,444,629	179,332,893	5.00%	6,967,842	6,306,385	100,000	6,406,385	6,306,385	0	100,000
2046	June 30, 2046	195,139,405	10,182,613	184,956,792	5.22%	7,273,291	6,516,282	100,000	6,616,282	6,516,282	0	100,000
2047	June 30, 2047	201,834,627	10,970,190	190,864,437	5.44%	7,593,054	6,623,187	100,000	6,723,187	6,623,187	0	100,000
2048	June 30, 2048	208,818,709	11,810,692	197,008,017	5.66%	7,920,309	6,772,774	100,000	6,872,774	6,772,774	0	100,000
2049	June 30, 2049	216,446,540	12,707,676	203,738,864	5.87%	8,269,607	6,968,570	100,000	7,068,570	6,968,570	0	100,000
2050	June 30, 2050	224,442,700	13,664,937	210,777,763	6.09%	8,654,867	7,144,398	100,000	7,244,398	7,144,398	0	100,000
2051	June 30, 2051	232,765,651	14,686,526	218,079,125	6.31%	9,028,486	7,295,080	100,000	7,395,080	7,295,080	0	100,000

## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### ALTERNATIVE FUNDING SCENARIO (OPEN GROUP)

#### Alternative Funding Scenario - 5.75% discount rate

For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 6.72% return	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Benefit Payments (With Implicit Cost)	VII. Trust Contributions Beyond Pay-as-you-go	VIII. Gross Trust Contributions [VI. + VII.]	IX. Benefit Payments Reimbursed from the Trust	X. Administrative & Investment Expenses Reimbursed from the Trust	XI. Total Employer Payments Less Reimbursements [VII. - VIII. - IX.]
2020	June 30, 2020	61,979,749	623,109	61,356,640	1.01%	1,347,201	2,479,749	95,000	2,574,749	2,479,749	0	2,574,749
2021	June 30, 2021	62,766,681	768,287	61,998,394	1.22%	1,388,945	2,619,273	100,000	2,719,273	2,619,273	0	2,719,273
2022	June 30, 2022	63,481,284	923,221	62,558,063	1.45%	1,433,896	2,761,299	100,000	2,861,299	2,761,299	0	2,861,299
2023	June 30, 2023	68,758,334	1,088,567	67,669,767	1.58%	1,486,482	2,840,082	100,000	2,940,082	2,840,082	0	2,940,082
2024	June 30, 2024	71,135,208	1,265,024	69,870,184	1.78%	1,537,718	2,979,318	100,000	3,079,318	2,979,318	0	3,079,318
2025	June 30, 2025	73,526,221	1,453,339	72,072,882	1.98%	1,599,976	3,164,810	100,000	3,264,810	3,164,810	0	3,264,810
2026	June 30, 2026	75,977,183	1,654,309	74,322,874	2.18%	1,658,160	3,297,331	100,000	3,397,331	3,297,331	0	3,397,331
2027	June 30, 2027	78,432,763	1,868,784	76,563,979	2.38%	1,721,353	3,487,206	100,000	3,587,206	3,487,206	0	3,587,206
2028	June 30, 2028	80,901,304	2,097,672	78,803,632	2.59%	1,787,841	3,690,361	100,000	3,790,361	3,690,361	0	3,790,361
2029	June 30, 2029	83,336,173	6,329,528	77,006,645	7.60%	1,859,014	3,924,918	3,960,000	7,884,918	3,924,918	0	7,884,918
2030	June 30, 2030	85,831,292	10,845,765	74,985,527	12.64%	1,928,054	4,094,159	3,960,000	8,054,159	4,094,159	0	8,054,159
2031	June 30, 2031	88,227,167	15,665,493	72,561,674	17.76%	2,003,562	4,327,501	3,960,000	8,287,501	4,327,501	0	8,287,501
2032	June 30, 2032	90,679,033	20,809,107	69,869,926	22.95%	2,076,825	4,561,941	3,960,000	8,521,941	4,561,941	0	8,521,941
2033	June 30, 2033	93,094,747	26,298,372	66,796,375	28.25%	2,159,671	4,720,473	3,960,000	8,680,473	4,720,473	0	8,680,473
2034	June 30, 2034	95,539,957	32,156,515	63,383,442	33.66%	2,245,785	4,874,720	3,960,000	8,834,720	4,874,720	0	8,834,720
2035	June 30, 2035	98,071,894	38,408,326	59,663,568	39.16%	2,326,969	5,005,997	3,960,000	8,965,997	5,005,997	0	8,965,997
2036	June 30, 2036	100,914,382	45,080,258	55,834,124	44.67%	2,422,419	5,051,392	3,960,000	9,011,392	5,051,392	0	9,011,392
2037	June 30, 2037	103,714,349	52,200,544	51,513,805	50.33%	2,520,412	5,136,490	3,960,000	9,096,490	5,136,490	0	9,096,490
2038	June 30, 2038	106,663,806	59,799,313	46,864,493	56.06%	2,617,592	5,296,718	3,960,000	9,256,718	5,296,718	0	9,256,718
2039	June 30, 2039	109,649,405	67,908,720	41,740,685	61.93%	2,728,375	5,419,037	3,960,000	9,379,037	5,419,037	0	9,379,037
2040	June 30, 2040	112,722,846	76,563,079	36,159,767	67.92%	2,834,755	5,516,880	3,960,000	9,476,880	5,516,880	0	9,476,880
2041	June 30, 2041	115,949,764	85,799,011	30,150,753	74.00%	2,950,678	5,684,790	3,960,000	9,644,790	5,684,790	0	9,644,790
2042	June 30, 2042	119,660,849	95,655,597	24,005,252	79.94%	3,075,791	5,863,360	3,960,000	9,823,360	5,863,360	0	9,823,360
2043	June 30, 2043	123,373,679	106,174,546	17,199,133	86.06%	3,207,583	6,005,676	3,960,000	9,965,676	6,005,676	0	9,965,676
2044	June 30, 2044	127,323,760	117,400,368	9,923,392	92.21%	3,340,309	6,083,112	3,960,000	10,043,112	6,083,112	0	10,043,112
2045	June 30, 2045	131,464,514	129,380,565	2,083,949	98.41%	3,481,498	6,306,385	3,960,000	10,266,385	6,306,385	0	10,266,385
2046	June 30, 2046	135,894,893	142,165,832	(6,270,939)	104.61%	3,634,116	6,516,282	3,960,000	10,476,282	6,516,282	0	10,476,282
2047	June 30, 2047	140,557,407	155,810,269	(15,252,862)	110.85%	3,793,886	6,623,187	3,960,000	10,583,187	6,623,187	0	10,583,187
2048	June 30, 2048	145,421,083	170,371,612	(24,950,529)	117.16%	3,957,400	6,772,774	3,960,000	10,732,774	6,772,774	0	10,732,774
2049	June 30, 2049	150,733,061	185,911,477	(35,178,416)	123.34%	4,131,928	6,968,570	3,960,000	10,928,570	6,968,570	0	10,928,570
2050	June 30, 2050	156,301,542	202,495,621	(46,194,079)	129.55%	4,324,424	7,144,398	3,960,000	11,104,398	7,144,398	0	11,104,398
2051	June 30, 2051	162,097,598	220,194,219	(58,096,621)	135.84%	4,511,103	7,295,080	3,960,000	11,255,080	7,295,080	0	11,255,080
2052	June 30, 2052	168,247,851	239,082,163	(70,834,312)	142.10%	4,716,426	7,509,576	3,960,000	11,469,576	7,509,576	0	11,469,576
2053	June 30, 2053	174,879,815	259,239,377	(84,359,562)	148.24%	4,932,162	7,755,290	3,960,000	11,715,290	7,755,290	0	11,715,290
2054	June 30, 2054	181,881,467	280,751,156	(98,869,689)	154.36%	5,167,180	8,014,560	3,960,000	11,974,560	8,014,560	0	11,974,560
2055	June 30, 2055	189,123,970	303,708,526	(114,584,556)	160.59%	5,410,786	8,329,381	3,960,000	12,289,381	8,329,381	0	12,289,381
2056	June 30, 2056	196,923,957	328,208,632	(131,284,675)	166.67%	5,665,968	8,591,428	3,960,000	12,551,428	8,591,428	0	12,551,428



## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### CONTRIBUTION PROJECTION DISCLOSURES

**Table 1: Projection of Contributions using a July 1, 2019 Valuation Date**

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total 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.]
June 30, 2020	32,353,040	0	32,353,040	0	2,479,749	0	2,479,749
June 30, 2021	30,643,968	2,679,663	33,323,631	0	2,619,273	0	2,619,273
June 30, 2022	29,164,616	5,158,724	34,323,340	0	2,761,299	0	2,761,299
June 30, 2023	27,937,639	7,415,401	35,353,040	0	2,840,082	0	2,840,082
June 30, 2024	26,732,499	9,681,132	36,413,631	0	2,979,318	0	2,979,318
June 30, 2025	25,738,203	11,767,837	37,506,040	0	3,164,810	0	3,164,810
June 30, 2026	24,763,764	13,867,457	38,631,221	0	3,297,331	0	3,297,331
June 30, 2027	23,795,823	15,994,335	39,790,158	0	3,487,206	0	3,487,206
June 30, 2028	22,825,394	18,158,469	40,983,863	0	3,690,361	0	3,690,361
June 30, 2029	21,904,721	20,308,658	42,213,379	0	3,924,918	0	3,924,918
June 30, 2030	20,918,475	22,561,305	43,479,780	0	4,094,159	0	4,094,159
June 30, 2031	20,033,813	24,750,360	44,784,173	0	4,313,825	13,676	4,327,501
June 30, 2032	19,097,386	27,030,312	46,127,698	0	4,527,784	34,157	4,561,941
June 30, 2033	18,234,737	29,276,792	47,511,529	0	4,657,682	62,791	4,720,473
June 30, 2034	17,411,285	31,525,590	48,936,875	0	4,772,486	102,234	4,874,720
June 30, 2035	16,490,499	33,914,482	50,404,981	0	4,853,658	152,339	5,005,997
June 30, 2036	15,688,820	36,228,310	51,917,130	0	4,858,354	193,038	5,051,392
June 30, 2037	14,937,652	38,536,992	53,474,644	0	4,895,851	240,639	5,136,490
June 30, 2038	14,123,786	40,955,097	55,078,883	0	5,001,670	295,048	5,296,718
June 30, 2039	13,398,859	43,332,390	56,731,249	0	5,075,527	343,510	5,419,037
June 30, 2040	12,565,391	45,867,795	58,433,186	0	5,120,696	396,184	5,516,880
June 30, 2041	11,797,920	48,388,262	60,186,182	0	5,214,297	470,493	5,684,790
June 30, 2042	11,133,371	50,858,396	61,991,767	0	5,298,728	564,632	5,863,360
June 30, 2043	10,582,214	53,269,306	63,851,520	0	5,327,338	678,338	6,005,676
June 30, 2044	10,024,381	55,742,685	65,767,066	0	5,264,435	818,677	6,083,112
June 30, 2045	9,412,803	58,327,275	67,740,078	0	5,322,322	984,063	6,306,385
June 30, 2046	8,872,592	60,899,688	69,772,280	0	5,383,641	1,132,641	6,516,282
June 30, 2047	8,360,554	63,504,894	71,865,448	0	5,324,501	1,298,686	6,623,187
June 30, 2048	7,789,759	66,231,652	74,021,411	0	5,291,281	1,481,493	6,772,774
June 30, 2049	7,182,804	69,059,249	76,242,053	0	5,314,373	1,654,197	6,968,570
June 30, 2050	6,700,638	71,828,677	78,529,315	0	5,305,508	1,838,890	7,144,398
June 30, 2051	6,167,906	74,717,288	80,885,194	0	5,240,854	2,054,226	7,295,080
June 30, 2052	5,616,212	77,695,538	83,311,750	0	5,214,720	2,294,856	7,509,576
June 30, 2053	5,043,444	80,767,659	85,811,103	0	5,197,903	2,557,387	7,755,290
June 30, 2054	4,537,996	83,847,440	88,385,436	0	5,166,540	2,848,020	8,014,560
June 30, 2055	4,043,199	86,993,800	91,036,999	0	5,161,103	3,168,278	8,329,381
June 30, 2056	3,522,485	90,245,624	93,768,109	0	5,108,168	3,483,260	8,591,428
June 30, 2057	2,996,483	93,584,669	96,581,152	0	5,124,340	3,821,060	8,945,400
June 30, 2058	2,500,291	96,978,296	99,478,587	0	5,026,161	4,181,947	9,208,108
June 30, 2059	2,023,531	100,439,414	102,462,945	0	4,933,684	4,553,023	9,486,707

## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### CONTRIBUTION PROJECTION DISCLOSURES (CONTINUED)

**Table 1: Projection of Contributions using a July 1, 2019 Valuation Date**

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total 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.]
June 30, 2060	1,646,960	103,889,873	105,536,833	0	4,808,425	4,945,263	9,753,688
June 30, 2061	1,310,432	107,392,506	108,702,938	0	4,717,537	5,371,742	10,089,279
June 30, 2062	1,028,897	110,935,129	111,964,026	0	4,553,064	5,833,219	10,386,283
June 30, 2063	689,521	114,633,426	115,322,947	0	4,413,520	6,328,305	10,741,825
June 30, 2064	493,951	118,288,684	118,782,635	0	4,328,318	6,858,961	11,187,279
June 30, 2065	309,983	122,036,131	122,346,114	0	4,205,621	7,429,373	11,634,994
June 30, 2066	180,543	125,835,954	126,016,497	0	4,117,122	8,010,671	12,127,793
June 30, 2067	70,923	129,726,069	129,796,992	0	4,019,755	8,624,287	12,644,042
June 30, 2068	23,535	133,667,367	133,690,902	0	3,922,006	9,273,763	13,195,769
June 30, 2069	19,186	137,682,443	137,701,629	0	3,816,249	9,937,659	13,753,908
June 30, 2070	15,634	141,817,044	141,832,678	0	3,696,527	10,633,301	14,329,828
June 30, 2071	12,723	146,074,935	146,087,658	0	3,580,177	11,366,155	14,946,332
June 30, 2072	0	150,470,288	150,470,288	0	3,460,759	12,135,461	15,596,220
June 30, 2073	0	154,984,397	154,984,397	0	3,336,052	12,939,869	16,275,921
June 30, 2074	0	159,633,929	159,633,929	0	3,207,946	13,778,661	16,986,607
June 30, 2075	0	164,422,947	164,422,947	0	3,076,791	14,656,035	17,732,826
June 30, 2076	0	169,355,635	169,355,635	0	2,942,994	15,574,954	18,517,948
June 30, 2077	0	174,436,304	174,436,304	0	2,806,933	16,530,721	19,337,654
June 30, 2078	0	179,669,393	179,669,393	0	2,668,936	17,528,822	20,197,758
June 30, 2079	0	185,059,475	185,059,475	0	2,529,409	18,570,485	21,099,894
June 30, 2080	0	190,611,259	190,611,259	0	2,388,693	19,656,698	22,045,391
June 30, 2081	0	196,329,597	196,329,597	0	2,247,239	20,785,675	23,032,914
June 30, 2082	0	202,219,485	202,219,485	0	2,105,501	21,962,605	24,068,106
June 30, 2083	0	208,286,070	208,286,070	0	1,964,042	23,190,849	25,154,891
June 30, 2084	0	214,534,652	214,534,652	0	1,823,463	24,468,503	26,291,966
June 30, 2085	0	220,970,692	220,970,692	0	1,684,360	25,801,364	27,485,724
June 30, 2086	0	227,599,813	227,599,813	0	1,547,408	27,194,672	28,742,080
June 30, 2087	0	234,427,807	234,427,807	0	1,413,289	28,644,093	30,057,382
June 30, 2088	0	241,460,641	241,460,641	0	1,282,780	30,157,880	31,440,660
June 30, 2089	0	248,704,460	248,704,460	0	1,156,468	31,736,477	32,892,945
June 30, 2090	0	256,165,594	256,165,594	0	1,035,099	33,383,950	34,419,049
June 30, 2091	0	263,850,562	263,850,562	0	919,280	35,101,461	36,020,741
June 30, 2092	0	271,766,079	271,766,079	0	809,560	36,893,189	37,702,749
June 30, 2093	0	279,919,061	279,919,061	0	706,405	38,764,850	39,471,255
June 30, 2094	0	288,316,633	288,316,633	0	610,283	40,719,007	41,329,290

## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### FIDUCIARY NET POSITION PROJECTION DISCLOSURES

**Table 2: Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2019 Valuation Date**

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Employer Share of Benefit Payments for Current Plan Members	III. Contributions to Trust for Current Plan Members beyond Pay-as-you- go	IV. Gross Contributions to Trust for Current Plan Members [II. + III.]	V. Administrative Expenses Withdrawn from the Trust for Current Plan Members	VI. Benefit Payments Withdrawn from the Trust for Current Plan Members	VII. Trust Withdrawals for Current Plan Members [V. + VI.]	VIII. Investment Earnings	IX. Ending Fiduciary Net Position for Current Plan Members
June 30, 2020	514,228	2,479,749	95,000	2,574,749	0	2,479,749	2,479,749	13,881	623,109
June 30, 2021	623,109	2,619,273	91,959	2,711,232	0	2,619,273	2,619,273	41,545	756,613
June 30, 2022	756,613	2,761,299	84,970	2,846,269	0	2,761,299	2,761,299	53,653	895,236
June 30, 2023	895,236	2,840,082	79,025	2,919,107	0	2,840,082	2,840,082	62,772	1,037,033
June 30, 2024	1,037,033	2,979,318	73,413	3,052,731	0	2,979,318	2,979,318	72,115	1,182,561
June 30, 2025	1,182,561	3,164,810	68,624	3,233,434	0	3,164,810	3,164,810	81,736	1,332,921
June 30, 2026	1,332,921	3,297,331	64,103	3,361,434	0	3,297,331	3,297,331	91,691	1,488,715
June 30, 2027	1,488,715	3,487,206	59,803	3,547,009	0	3,487,206	3,487,206	102,018	1,650,536
June 30, 2028	1,650,536	3,690,361	55,694	3,746,055	0	3,690,361	3,690,361	112,757	1,818,987
June 30, 2029	1,818,987	3,924,918	51,890	3,976,808	0	3,924,918	3,924,918	123,951	1,994,828
June 30, 2030	1,994,828	4,094,159	48,111	4,142,270	0	4,094,159	4,094,159	135,643	2,178,582
June 30, 2031	2,178,582	4,313,825	44,734	4,358,559	0	4,313,825	4,313,825	147,879	2,357,519
June 30, 2032	2,357,519	4,527,784	41,401	4,569,185	0	4,527,784	4,527,784	159,794	2,524,557
June 30, 2033	2,524,557	4,657,682	38,380	4,696,062	0	4,657,682	4,657,682	170,919	2,671,065
June 30, 2034	2,671,065	4,772,486	35,579	4,808,065	0	4,772,486	4,772,486	180,672	2,785,082
June 30, 2035	2,785,082	4,853,658	32,716	4,886,374	0	4,853,658	4,853,658	188,239	2,853,698
June 30, 2036	2,853,698	4,858,354	30,219	4,888,573	0	4,858,354	4,858,354	192,767	2,883,646
June 30, 2037	2,883,646	4,895,851	27,934	4,923,785	0	4,895,851	4,895,851	194,704	2,865,645
June 30, 2038	2,865,645	5,001,670	25,643	5,027,313	0	5,001,670	5,001,670	193,419	2,789,659
June 30, 2039	2,789,659	5,075,527	23,618	5,099,145	0	5,075,527	5,075,527	188,246	2,658,013
June 30, 2040	2,658,013	5,120,696	21,504	5,142,200	0	5,120,696	5,120,696	179,329	2,462,662
June 30, 2041	2,462,662	5,214,297	19,602	5,233,899	0	5,214,297	5,214,297	166,139	2,177,910
June 30, 2042	2,177,910	5,298,728	17,959	5,316,687	0	5,298,728	5,298,728	146,949	1,778,186
June 30, 2043	1,778,186	5,327,338	16,573	5,343,911	0	5,327,338	5,327,338	120,042	1,236,463
June 30, 2044	1,236,463	5,264,435	15,242	5,279,677	0	5,264,435	5,264,435	83,594	516,622
June 30, 2045	516,622	5,322,322	13,895	5,336,217	0	5,322,322	5,322,322	35,176	49,071
June 30, 2046	49,071	5,383,641	12,717	5,396,358	0	5,383,641	5,383,641	3,718	16,435
June 30, 2047	16,435	5,324,501	11,634	5,336,135	0	5,324,501	5,324,501	1,489	13,123
June 30, 2048	13,123	5,291,281	10,524	5,301,805	0	5,291,281	5,291,281	1,230	11,754
June 30, 2049	11,754	5,314,373	9,421	5,323,794	0	5,314,373	5,314,373	1,101	10,522
June 30, 2050	10,522	5,305,508	8,533	5,314,041	0	5,305,508	5,305,508	989	9,522
June 30, 2051	9,522	5,240,854	7,626	5,248,480	0	5,240,854	5,240,854	892	8,518
June 30, 2052	8,518	5,214,720	6,741	5,221,461	0	5,214,720	5,214,720	795	7,536
June 30, 2053	7,536	5,197,903	5,877	5,203,780	0	5,197,903	5,197,903	701	6,578
June 30, 2054	6,578	5,166,540	5,134	5,171,674	0	5,166,540	5,166,540	612	5,746
June 30, 2055	5,746	5,161,103	4,441	5,165,544	0	5,161,103	5,161,103	533	4,974
June 30, 2056	4,974	5,108,168	3,757	5,111,925	0	5,108,168	5,108,168	458	4,215
June 30, 2057	4,215	5,124,340	3,103	5,127,443	0	5,124,340	5,124,340	386	3,489
June 30, 2058	3,489	5,026,161	2,513	5,028,674	0	5,026,161	5,026,161	318	2,831
June 30, 2059	2,831	4,933,684	1,975	4,935,659	0	4,933,684	4,933,684	256	2,231

## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### FIDUCIARY POSITION PROJECTION DISCLOSURES (CONTINUED)

**Table 2: Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2019 Valuation Date**

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Employer Share of Benefit Payments for Current Plan Members	III. Contributions to Trust for Current Plan Members beyond Pay-as-you- go	IV. Gross Contributions to Trust for Current Plan Members [III. + III.]	V. Administrative Expenses Withdrawn from the Trust for Current Plan Members	VI. Benefit Payments Withdrawn from the Trust for Current Plan Members	VII. Trust Withdrawals for Current Plan Members [V. + VI.]	VIII. Investment Earnings	IX. Ending Fiduciary Net Position for Current Plan Members
June 30, 2060	2,231	4,808,425	1,561	4,809,986	0	4,808,425	4,808,425	202	1,763
June 30, 2061	1,763	4,717,537	1,206	4,718,743	0	4,717,537	4,717,537	158	1,364
June 30, 2062	1,364	4,553,064	919	4,553,983	0	4,553,064	4,553,064	122	1,041
June 30, 2063	1,041	4,413,520	598	4,414,118	0	4,413,520	4,413,520	90	688
June 30, 2064	688	4,328,318	416	4,328,734	0	4,328,318	4,328,318	60	476
June 30, 2065	476	4,205,621	253	4,205,874	0	4,205,621	4,205,621	40	293
June 30, 2066	293	4,117,122	143	4,117,265	0	4,117,122	4,117,122	24	167
June 30, 2067	167	4,019,755	55	4,019,810	0	4,019,755	4,019,755	13	68
June 30, 2068	68	3,922,006	18	3,922,024	0	3,922,006	3,922,006	5	23
June 30, 2069	23	3,816,249	14	3,816,263	0	3,816,249	3,816,249	2	16
June 30, 2070	16	3,696,527	11	3,696,538	0	3,696,527	3,696,527	1	12
June 30, 2071	12	3,580,177	9	3,580,186	0	3,580,177	3,580,177	1	10
June 30, 2072	10	3,460,759	0	3,460,759	0	3,460,759	3,460,759	1	1
June 30, 2073	1	3,336,052	0	3,336,052	0	3,336,052	3,336,052	0	0
June 30, 2074	0	3,207,946	0	3,207,946	0	3,207,946	3,207,946	0	0
June 30, 2075	0	3,076,791	0	3,076,791	0	3,076,791	3,076,791	0	0
June 30, 2076	0	2,942,994	0	2,942,994	0	2,942,994	2,942,994	0	0
June 30, 2077	0	2,806,933	0	2,806,933	0	2,806,933	2,806,933	0	0
June 30, 2078	0	2,668,936	0	2,668,936	0	2,668,936	2,668,936	0	0
June 30, 2079	0	2,529,409	0	2,529,409	0	2,529,409	2,529,409	0	0
June 30, 2080	0	2,388,693	0	2,388,693	0	2,388,693	2,388,693	0	0
June 30, 2081	0	2,247,239	0	2,247,239	0	2,247,239	2,247,239	0	0
June 30, 2082	0	2,105,501	0	2,105,501	0	2,105,501	2,105,501	0	0
June 30, 2083	0	1,964,042	0	1,964,042	0	1,964,042	1,964,042	0	0
June 30, 2084	0	1,823,463	0	1,823,463	0	1,823,463	1,823,463	0	0
June 30, 2085	0	1,684,360	0	1,684,360	0	1,684,360	1,684,360	0	0
June 30, 2086	0	1,547,408	0	1,547,408	0	1,547,408	1,547,408	0	0
June 30, 2087	0	1,413,289	0	1,413,289	0	1,413,289	1,413,289	0	0
June 30, 2088	0	1,282,780	0	1,282,780	0	1,282,780	1,282,780	0	0
June 30, 2089	0	1,156,468	0	1,156,468	0	1,156,468	1,156,468	0	0
June 30, 2090	0	1,035,099	0	1,035,099	0	1,035,099	1,035,099	0	0
June 30, 2091	0	919,280	0	919,280	0	919,280	919,280	0	0
June 30, 2092	0	809,560	0	809,560	0	809,560	809,560	0	0
June 30, 2093	0	706,405	0	706,405	0	706,405	706,405	0	0
June 30, 2094	0	610,283	0	610,283	0	610,283	610,283	0	0

## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### BENEFIT PAYMENT PROJECTION DISCLOSURES

**Table 3: Actuarial Present Values of Projected Benefit Payments using a July 1, 2019 Valuation Date**

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit Payments for Current Plan Members	III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments [II. - III.]	V. Present Value of Funded Benefit Payments using the Long-Term Rate of Return [6.72%]	VI. Present Value of Unfunded Benefit Payments using the Municipal Bond Rate [2.66%]	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [3.10%]	
June 30, 2020	514,228	2,479,749	514,228	1,965,521	514,228	1,965,521	2,479,749	Sum of Column V.
June 30, 2021	623,109	2,619,273	623,109	1,996,164	583,873	1,944,437	2,540,577	20,706,493
June 30, 2022	756,613	2,761,299	756,613	2,004,686	664,327	1,902,137	2,597,865	
June 30, 2023	895,236	2,840,082	895,236	1,944,846	736,546	1,797,539	2,591,706	Sum of Column VI.
June 30, 2024	1,037,033	2,979,318	1,037,033	1,942,285	799,483	1,748,654	2,637,080	99,997,171
June 30, 2025	1,182,561	3,164,810	1,182,561	1,982,249	854,269	1,738,389	2,717,100	
June 30, 2026	1,332,921	3,297,331	1,332,921	1,964,410	902,255	1,678,103	2,745,821	Sum of Column VII.
June 30, 2027	1,488,715	3,487,206	1,488,715	1,998,491	944,258	1,662,977	2,816,689	[V. + VI.]
June 30, 2028	1,650,536	3,690,361	1,650,536	2,039,825	980,976	1,653,388	2,891,224	120,703,664
June 30, 2029	1,818,987	3,924,918	1,818,987	2,105,931	1,013,018	1,662,738	2,982,600	
June 30, 2030	1,994,828	4,094,159	1,994,828	2,099,331	1,040,992	1,614,575	3,017,732	
June 30, 2031	2,178,582	4,313,825	2,178,582	2,135,243	1,065,295	1,599,640	3,084,112	
June 30, 2032	2,357,519	4,527,784	2,357,519	2,170,265	1,080,203	1,583,746	3,139,821	
June 30, 2033	2,524,557	4,657,682	2,524,557	2,133,125	1,083,901	1,516,306	3,132,858	
June 30, 2034	2,671,065	4,772,486	2,671,065	2,101,421	1,074,591	1,455,061	3,113,631	
June 30, 2035	2,785,082	4,853,658	2,785,082	2,068,576	1,049,907	1,395,203	3,071,448	
June 30, 2036	2,853,698	4,858,354	2,853,698	2,004,656	1,008,033	1,317,054	2,982,049	
June 30, 2037	2,883,646	4,895,851	2,883,646	2,012,205	954,472	1,287,756	2,914,778	
June 30, 2038	2,865,645	5,001,670	2,865,645	2,136,025	888,787	1,331,575	2,888,311	
June 30, 2039	2,789,659	5,075,527	2,789,659	2,285,868	810,738	1,388,059	2,842,900	
June 30, 2040	2,658,013	5,120,696	2,658,013	2,462,683	723,837	1,456,677	2,782,025	
June 30, 2041	2,462,662	5,214,297	2,462,662	2,751,635	628,409	1,585,416	2,747,764	
June 30, 2042	2,177,910	5,298,728	2,177,910	3,120,818	520,753	1,751,534	2,708,363	
June 30, 2043	1,778,186	5,327,338	1,778,186	3,549,152	398,404	1,940,316	2,641,175	
June 30, 2044	1,236,463	5,264,435	1,236,463	4,027,972	259,586	2,145,023	2,531,572	
June 30, 2045	516,622	5,322,322	516,622	4,805,700	101,631	2,492,872	2,482,511	
June 30, 2046	49,071	5,383,641	49,071	5,334,570	9,046	2,695,507	2,435,666	
June 30, 2047	16,435	5,324,501	16,435	5,308,066	2,839	2,612,613	2,336,534	
June 30, 2048	13,123	5,291,281	13,123	5,278,158	2,124	2,530,573	2,252,193	
June 30, 2049	11,754	5,314,373	11,754	5,302,619	1,783	2,476,422	2,194,060	
June 30, 2050	10,522	5,305,508	10,522	5,294,986	1,495	2,408,778	2,124,590	
June 30, 2051	9,522	5,240,854	9,522	5,231,332	1,268	2,318,152	2,035,644	
June 30, 2052	8,518	5,214,720	8,518	5,206,202	1,063	2,247,234	1,964,637	
June 30, 2053	7,536	5,197,903	7,536	5,190,367	881	2,182,344	1,899,464	
June 30, 2054	6,578	5,166,540	6,578	5,159,962	721	2,113,340	1,831,278	
June 30, 2055	5,746	5,161,103	5,746	5,155,357	590	2,056,740	1,774,388	
June 30, 2056	4,974	5,108,168	4,974	5,103,194	478	1,983,172	1,703,424	
June 30, 2057	4,215	5,124,340	4,215	5,120,125	380	1,938,191	1,657,476	
June 30, 2058	3,489	5,026,161	3,489	5,022,672	295	1,852,032	1,576,875	
June 30, 2059	2,831	4,933,684	2,831	4,930,853	224	1,771,061	1,501,356	

## APPENDIX I – LIABILITIES, ASSETS, & CASH FLOWS

### BENEFIT PAYMENT PROJECTION DISCLOSURES (CONTINUED)

**Table 3: Actuarial Present Values of Projected Benefit Payments using a July 1, 2019 Valuation Date**

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Benefit Payments for Current Plan Members	III. Funded Portion of Benefit Payments	IV. Unfunded Portion of Benefit Payments [II. - III.]	V. Present Value of Funded Benefit Payments using the Long-Term Rate of Return [6.72%]	VI. Present Value of Unfunded Benefit Payments using the Municipal Bond Rate [2.66%]	VII. Present Value of Benefit Payments using the Single Equivalent Discount Rate [3.10%]
June 30, 2060	2,231	4,808,425	2,231	4,806,194	165	1,681,553	1,419,276
June 30, 2061	1,763	4,717,537	1,763	4,715,774	123	1,607,163	1,350,613
June 30, 2062	1,364	4,553,064	1,364	4,551,700	89	1,511,048	1,264,361
June 30, 2063	1,041	4,413,520	1,041	4,412,479	64	1,426,872	1,188,787
June 30, 2064	688	4,328,318	688	4,327,630	39	1,363,171	1,130,810
June 30, 2065	476	4,205,621	476	4,205,145	26	1,290,265	1,065,742
June 30, 2066	293	4,117,122	293	4,116,829	15	1,230,434	1,011,970
June 30, 2067	167	4,019,755	167	4,019,588	8	1,170,240	958,352
June 30, 2068	68	3,922,006	68	3,921,938	3	1,112,223	906,954
June 30, 2069	23	3,816,249	23	3,816,226	1	1,054,200	855,983
June 30, 2070	16	3,696,527	16	3,696,511	1	994,669	804,218
June 30, 2071	12	3,580,177	12	3,580,165	0	938,398	755,503
June 30, 2072	10	3,460,759	10	3,460,749	0	883,593	708,361
June 30, 2073	1	3,336,052	1	3,336,051	0	829,683	662,320
June 30, 2074	0	3,207,946	0	3,207,946	0	777,149	617,751
June 30, 2075	0	3,076,791	0	3,076,791	0	726,061	574,693
June 30, 2076	0	2,942,994	0	2,942,994	0	676,491	533,186
June 30, 2077	0	2,806,933	0	2,806,933	0	628,496	493,257
June 30, 2078	0	2,668,936	0	2,668,936	0	582,112	454,916
June 30, 2079	0	2,529,409	0	2,529,409	0	537,385	418,180
June 30, 2080	0	2,388,693	0	2,388,693	0	494,338	383,051
June 30, 2081	0	2,247,239	0	2,247,239	0	453,013	349,540
June 30, 2082	0	2,105,501	0	2,105,501	0	413,442	317,654
June 30, 2083	0	1,964,042	0	1,964,042	0	375,671	287,410
June 30, 2084	0	1,823,463	0	1,823,463	0	339,744	258,821
June 30, 2085	0	1,684,360	0	1,684,360	0	305,694	231,894
June 30, 2086	0	1,547,408	0	1,547,408	0	273,562	206,638
June 30, 2087	0	1,413,289	0	1,413,289	0	243,377	183,058
June 30, 2088	0	1,282,780	0	1,282,780	0	215,178	161,161
June 30, 2089	0	1,156,468	0	1,156,468	0	188,963	140,927
June 30, 2090	0	1,035,099	0	1,035,099	0	164,749	122,347
June 30, 2091	0	919,280	0	919,280	0	142,524	105,393
June 30, 2092	0	809,560	0	809,560	0	122,260	90,025
June 30, 2093	0	706,405	0	706,405	0	103,917	76,194
June 30, 2094	0	610,283	0	610,283	0	87,451	63,848

APPENDIX II – PLAN PROVISIONS

<u>Effective Date</u>	GASB 74 was adopted for the fiscal year ending June 30, 2017  GASB 75 was adopted for the fiscal year ending June 30, 2018
<u>Plan Year</u>	July 1 through June 30.
<u>Premium Effective Date</u>	<b>Medicare Supplement Plans:</b> effective January 1, 2020 <b>Non-Medicare Plans:</b> effective July 1, 2020 <b>Dental Plans:</b> N/A
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Blue Cross Blue Shield of Massachusetts as well as \$2,000 of Group Term Life Insurance. Retirees can purchase Dental Insurance via DMS or Altus Dental by paying 100% of the premiums.
<u>Medicare Part B</u>	Medicare Part B Premium reimbursements by the Town were not reflected in this valuation. Medicare Part B Penalty reimbursements by the Town were not reflected in this valuation.
<u>Surviving Spouse Coverage</u>	Spousal benefits do not change after the death of a plan participant.

## APPENDIX II – PLAN PROVISIONS

### Eligibility

Hire Date	Eligibility
Before April 2, 2012	<ul style="list-style-type: none"> <li>• Age 55 with 10 years of creditable service</li> <li>• 20 years of service regardless of age</li> </ul>
On or after April 2, 2012	<ul style="list-style-type: none"> <li>• Age 60 with 10 years of creditable service</li> </ul>

### Participant Contributions

Group	Individual	Two-Person / Family
<b>Medical</b>	<ul style="list-style-type: none"> <li>• 30% for Blue Care Elect</li> <li>• 25% for all other plans</li> </ul>	<ul style="list-style-type: none"> <li>• 30% for Blue Care Elect</li> <li>• 25% for all other plans</li> </ul>
<b>Dental</b>	100%	100%
<b>Life</b>	25%	N/A



APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONSPre-Retirement Mortality

General: RP-2014 Mortality Table for Blue Collar Employees projected generationally with scale MP-2016 for males and females, set forward 1 year for females  
Teachers: RP-2014 Mortality Table for White Collar Employees projected generationally with scale MP-2016 for males and females

Post-Retirement Mortality

General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year for females  
Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females

Disabled Mortality

General: RP-2014 Mortality Table for Blue Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females, set forward 1 year  
Teachers: RP-2014 Mortality Table for White Collar Healthy Annuitants projected generationally with scale MP-2016 for males and females

Assumption Experience Study

The actuarial assumptions used to calculate the actuarial accrued liability and the service cost primarily reflect the latest experience studies of the Massachusetts PERAC issued in 2014 and their most recent analysis of retiree mortality during 2015 and 2016.

Discount Rate

3.25% per annum (previously 3.25%, used in the calculation of the Interest Cost)

Net Long Term Rate of Return

6.72% (based on investment policy)

Municipal Bond Rate

2.66% as of June 30, 2020 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)

Actuarial Cost Method

Individual Entry Age Normal

Asset-Valuation Method

Market Value of Assets as of the Measurement Date, June 30, 2020

## APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

### Employee Termination

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

#### **Non-Public Safety Employees**

<b>Service</b>	<b>Male</b>	<b>Female</b>
0	15.00%	15.00%
5	7.60%	7.60%
10	5.40%	5.40%
15	3.30%	3.30%
20	2.00%	2.00%

#### **Public Safety Employees**

<b>Service</b>	<b>Male</b>	<b>Female</b>
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%

## APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

### Retirement Rates for Eligible Employees

Age	Standard Male	Standard Female	Male Teachers	Female Teachers	Public Safety
45 - 49	0.00%	0.00%	0.00%	0.00%	6.00%
50 - 51	3.00%	3.00%	2.00%	1.50%	6.00%
52	3.00%	3.00%	2.00%	1.50%	6.00%
53	3.00%	3.00%	2.00%	1.50%	7.50%
54	3.00%	3.50%	2.00%	2.00%	15.00%
55	3.50%	5.00%	6.00%	5.00%	25.00%
56	3.50%	5.00%	20.00%	15.00%	15.00%
57	4.00%	5.50%	40.00%	35.00%	15.00%
58	5.00%	6.00%	50.00%	35.00%	15.00%
59	6.00%	6.50%	50.00%	35.00%	15.00%
60	9.00%	7.50%	40.00%	35.00%	20.00%
61	11.00%	10.00%	40.00%	35.00%	20.00%
62	15.00%	15.00%	35.00%	35.00%	20.00%
63	15.00%	15.00%	35.00%	35.00%	20.00%
64	16.00%	15.00%	35.00%	35.00%	30.00%
65	20.00%	20.00%	35.00%	35.00%	50.00%
66	20.00%	20.00%	40.00%	35.00%	25.00%
67	20.00%	20.00%	40.00%	30.00%	25.00%
68	20.00%	20.00%	40.00%	30.00%	25.00%
69	20.00%	20.00%	40.00%	30.00%	25.00%
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%

### Permanent Disability Rates

Age	Standard	Teachers	Public
20	0.01%	0.05%	0.20%
30	0.01%	0.07%	0.21%
40	0.07%	0.21%	0.71%
50	0.13%	0.42%	1.10%
60	0.12%	0.50%	0.80%

### APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

#### Trend Rate

**Medicare Supplement Plans:** Initial Trend of 4.50% for 2020 grading down 0.00% per year for an ultimate trend rate of 4.50%.

**Active Plans:** Initial Trend of 4.50% for 2020 grading down 0.00% per year for an ultimate trend rate of 4.50%.

**Dental Plans:** N/A

#### Participation Rate

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

#### Spouse Participation Rate

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.

#### Spouse Demographics

It was assumed that a male spouse is three years older than a female spouse and same sex spouses were assumed to be the same age. For current retirees, the actual census information was used, if available.

#### Medicare Eligibility

It was assumed that retirees who were over age 66 on the valuation date and were enrolled in an Active plan were ineligible for Medicare and all other participants would be eligible for Medicare at age 65, absent any information to the contrary.

#### School Demographics

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

#### Compensation Increases

3.00% per year.

#### Inflation Rate

2.50% per year.

### APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

#### Implicit Subsidy

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. 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.

<b>Impact of Implicit Subsidy</b>		
	<b>As of the Measurement Date</b>	
<b>Impact on Liability</b>	<b><u>June 30, 2020</u></b>	<b><u>June 30, 2019</u></b>
I. Total OPEB Liability	88,999,820	78,094,481
II. Total OPEB Liability (Excluding Implicit Subsidy)	<u>74,632,239</u>	<u>71,712,842</u>
III. Liability from Implicit Subsidy [I. - II.]	14,367,581	6,381,639

  

	<b>For the Measurement Period Ending</b>	
<b>Impact on Payments</b>	<b><u>June 30, 2020</u></b>	<b><u>June 30, 2019</u></b>
IV. Employer Payments (Including Implicit Subsidy)	2,479,749	2,071,229
V. Actual Employer Payments	<u>1,994,060</u>	<u>1,822,188</u>
VI. Implicit Subsidy [IV. - V.]	485,689	249,041

### APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Pre-65 and post-65 per capita costs were developed using fully insured premium rates.

#### ANNUAL PER CAPITA CLAIMS\*

ACTIVE EMPLOYEES			RETIREE - NOT MEDICARE ELIGIBLE			RETIREE - MEDICARE ELIGIBLE		
Age Bracket	Female	Male	Age Bracket	Female	Male	Age Bracket	Female	Male
24 & Under	4,199	2,647	44 & Under	8,624	5,651	65 to 69	4,449	4,449
25 to 29	6,194	2,754	45 to 49	9,473	7,135	70 to 74	4,449	4,449
30 to 34	7,828	3,456	50 to 54	11,144	9,397	75 to 79	4,449	4,449
35 to 39	8,063	4,341	55 to 59	12,882	12,217	80 to 84	4,449	4,449
40 to 44	8,253	5,408	60 to 64	15,330	15,677	85 to 89	4,449	4,449
45 to 49	9,065	6,828	65 to 69	18,376	19,555	90 & Over	4,449	4,449
50 to 54	10,664	8,992	70 to 74	21,670	23,434			
55 to 59	12,327	11,691	75 to 79	25,166	27,677			
60 to 64	14,670	15,002	80 to 84	28,855	31,813			
65 to 69	17,585	18,713	85 to 89	32,937	36,415			
70 & Over	20,737	22,425	90 & Over	32,937	36,415			

\*Based on SOA 'Health Care Costs--From Birth to Death' study published in 2013

### APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

#### Open Group Forecast

For the projection of plan liabilities in future years, it was assumed that the number of active employees will remain constant and those who terminate employment or retire will be replaced with new employees with the demographics below:

Open Group Forecast Population Demographics		
Age	Male	Female
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 liabilities being reported as of the Measurement Date of June 30, 2020 reflect a closed group and do not reflect any new entrants after the valuation date.

To the best of our knowledge all employees who are eligible on the valuation date are included in the actuarial valuation.

## APPENDIX IV – PLAN DEMOGRAPHICS

### Active Employees

Valuation Date	July 1, 2019	July 1, 2017
A. Average Age at Hire	33.31	33.30
B. Average Service	<u>10.29</u>	<u>10.98</u>
C. Average Current Age	43.60	44.28

### Retired Employees & Spouses

Valuation Date	July 1, 2019	July 1, 2017
A. Under Age 65	101	99
B. Age 65 & Over	<u>328</u>	<u>317</u>
C. Total	429	416

### Average Service Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-24	26									26
25-29	31	11								42
30-34	34	14	10							58
35-39	18	11	16	6						51
40-44	15	12	12	11	8					58
45-49	20	12	8	12	19	2	1			74
50-54	15	13	12	14	8	2	3	1		68
55-59	6	7	7	15	8	2	3	2		50
60-64	1	3	6	9	3	1		2	1	26
65-69	1	1	1		2					5
70+	1									1
<b>Total</b>	168	84	72	67	48	7	7	5	1	459



## APPENDIX IV – PLAN DEMOGRAPHICS

### Plan Offerings

### Number of Contracts

	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
HMO Blue	158		244	402
Blue Care Elect	9		5	14
Managed Blue	72			72
Medex	246			246
Total	485	0	249	734

### Per Contract Costs (monthly)

	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
HMO Blue	804.00		2,105.00
Blue Care Elect	1,384.00		3,444.00
Managed Blue	353.69	707.38	
Medex	386.49	772.98	
Dental Plan	N/A		N/A

## APPENDIX V – OVERVIEW OF GASB 74 & 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 postemployment 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 postemployment benefits.

## APPENDIX V – OVERVIEW OF GASB 74 & 75

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 postemployment benefits and when will they start?

Medical inflation and claims cost assumptions – When an employee starts receiving postemployment 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.

## 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.

Entry Age Normal – Under this method, the annual service 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 service cost for each active member is a level percent of payroll. The total OPEB liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

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

## GLOSSARY

Government Accounting Standards Board (GASB) – “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 postemployment benefits.

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

Other Postemployment Benefits (OPEB) – Benefits that an employee will begin to receive at the start of retirement. This does not include pension benefits paid to the retired employee.

OPEB Trust – An entity which holds assets for the sole purpose of funding OPEB. All contributions and earnings within this entity must be irrevocable and protected from creditors.

Pay-as-you-go funding – Paying benefits (such as pensions or OPEB) on a cash basis, with no money set aside for future liabilities which are already incurred.

Service Cost – The actuarially determined present value contribution needed to fund benefits which are earned for employee service rendered during the current year. Service cost depends on many factors, including the interest rate used to discount future cashflows, and expected inflation.

Total OPEB Liability (TOL) – That portion, as determined by the Individual Entry Age Normal Actuarial Cost Method, of the Actuarial Present Value of benefits and expenses which are not provided for by future Service Costs.