

# Town of Walpole 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 27, 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	29
III  ACTUARIAL METHODS & ASSUMPTIONS	31
IV  PLAN DEMOGRAPHICS	38
V   OVERVIEW OF GASB 74 & 75	40
<u>GLOSSARY</u>	42



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October 27, 2020

***Personal and Confidential***

Ms. Marilyn Thompson  
Tax Collector / Treasurer  
Town of Walpole  
135 School Street  
Walpole MA, 02081

Dear Ms. Thompson:

We have performed an actuarial valuation of the Town of Walpole 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 Walpole, 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 27, 2020**

ACTUARIAL CERTIFICATION

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

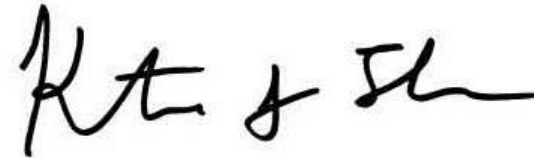
The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may yield results significantly different than those reported here. As such, additional determinations may be needed for other 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.



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



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Kurtis J. Thompson, ASA, MAAA  
Consulting Actuary

## EXECUTIVE SUMMARY

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

For the year ending on the Measurement Date of June 30, 2020, experience was largely in line with expectation, with an actuarial an experience gain of \$191,242 or 0.43% of the beginning Total OPEB Liability ("TOL"). During the period there was an investment loss of \$135,114 below the expected return.

The discount rate has been decreased from 7.50% to 6.75%. There are several factors that contributed to this change. PERAC is moving all pension systems from a 7.50% discount rate to a maximum discount rate of 7.00% based on the PRIT portfolio. The Town's investment portfolio achieves an expected investment rate of return of 6.74% based on the 2019 Horizon Survey of Capital Markets. Under GASB 75 standards the discount rate used in the valuation is based on the assets and trust contributions compared to expected future benefit payments. When applied to the Town's projected contributions and benefit payments the GASB 75 methodology results in a final discount rate of 6.75% for the Town's FY 2020 valuation.

The decrease in discount rate caused disclosed liabilities to increase by \$4.4 million. It is important to note that changes in the discount rate impact disclosed liabilities, but they do not impact the actual cash cost of the plan. The cost of the plan is ultimately the benefit payments that are made to pay retirees premiums.

## EXECUTIVE SUMMARY

How did plan liabilities to change from FY 19 to FY 20? (Cont.)

The chart below details the changes in the Town's Total OPEB Liabilities from June 30, 2019 to June 30, 2020.

Changes in Net OPEB Liability				
		Increase (Decrease)		
		Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
I.	Balances for June 30, 2019	44,461,213	2,883,904	41,577,309
II.	Prior Period Adjustment	0	809,333	(809,333)
III.	Balances for June 30, 2019 with Adjustment [I. + II.]	44,461,213	3,693,237	40,767,976
Changes for the year:				
IV.	Service Cost	1,362,396	0	1,362,396
V.	Interest on Total OPEB Liability, Service Cost, and Benefit Payments	3,353,420	0	3,353,420
VI.	Changes in Benefit Terms *	0	0	0
VII.	Change in Assumptions **	4,432,190	0	4,432,190
VIII.	Differences Between Actual and Expected Experience **	(191,242)	0	(191,242)
IX.	Net Investment Income	0	140,065	(140,065)
X.	Employer Contributions to Trust	0	3,055,604	(3,055,604)
XI.	Benefit Payments Withdrawn from Trust	0	(2,263,604)	2,263,604
XII.	Benefit Payments Excluding Implicit Cost	(1,616,868)	0	(1,616,868)
XIII.	Implicit Cost Amount	(646,736)	0	(646,736)
XIV.	Total Benefit Payments Including Implicit Cost [XII. + XIII.]	(2,263,604)	0	(2,263,604)
XV.	Administrative Expense	0	0	0
XVI.	Other Charges	0	0	0
XVII.	Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]	6,693,160	932,065	5,761,095
XVIII.	Balances at June 30, 2020 [III.+XVII.]	51,154,373	4,625,302	46,529,071

\* Recognized Immediately

\*\* Amortized over 6.85 years

## EXECUTIVE SUMMARY

### Assumption Changes

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

- ✓ Due to the GASB 75 standards the discount rate has been changed from 7.50% to 6.75% increasing the disclosed liability by \$4.4 million.
- ✓ Assumption changes caused Service Cost to increase by \$240 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.

### 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 6.85 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 \$4,625,302 of OPEB assets as of June 30, 2020.
- ✓ Funding Policy - The Town is expected to contribute \$750,000 per year until their pension system is fully funded, at which point the Town will reallocate the funds used to pay its pension amortization towards OPEB.
- ✓ Investment Policy - The Town is expected to earn 6.74% on assets based on its investment policy.



## EXECUTIVE SUMMARY

### Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare supplement) plans - represent 62.78% 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 (6.75%) – Higher discount rates yield lower liabilities and vice versa
- ✓ Cost Sharing - Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance

### 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 16 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.

## 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.

<b>Representative Plan Statistics</b>		
<b>Valuation Date</b>	<b>July 1, 2019</b>	<b>July 1, 2017</b>
<b>Measurement Date &amp; Period Ending</b>	<b>June 30, 2020</b>	<b>June 30, 2019</b>
<b>Reporting Date/Fiscal Year End</b>	<b>June 30, 2020</b>	<b>June 30, 2019</b>
Total OPEB Liability	51,154,373	44,461,213
Per Eligible Active Plan Participant	38,102	N/A
Per Retiree/Spouse Plan Participant	52,385	N/A
Total Annual Service Cost (Annual Benefit Accrual)	1,362,396	1,335,205
Per Eligible Active Plan Participant	1,790	1,766
Expected Employer Share of Retiree Costs	2,263,604	1,720,451
Per Retiree/Spouse Plan Participant	5,351	4,077
Net OPEB Liability as a % of Covered Payroll	83.40%	76.00%
Average Annual Medical Premium		
Individual Active Plan	9,342	
2-Person Active Plan	N/A	
Family Active Plan	24,853	
Medicare Supplement Plan	4,073	

## 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	423	51,154,373	51,154,373	2,263,604	2,263,604
June 30, 2025	558	62,094,604	53,563,351	3,329,497	2,872,053
June 30, 2030	625	73,101,243	54,394,190	4,102,989	3,053,009
June 30, 2035	668	85,010,640	54,565,095	4,684,392	3,006,733
June 30, 2040	675	99,893,026	55,308,347	5,326,049	2,948,904
June 30, 2045	672	118,417,559	56,556,886	6,417,944	3,065,246
June 30, 2050	668	141,583,322	58,330,454	7,313,098	3,012,900

PRINCIPAL RESULTS OF THE VALUATION

**Town of Walpole**

**Assuming Funding - 6.75% 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	28,995,540	N/A
B. Retirees/Disabled	<u>22,158,833</u>	<u>N/A</u>
C. Total	51,154,373	44,461,213
II. Fiduciary Net Position [Plan Assets]	4,625,302	3,693,237
III. Net OPEB Liability (Asset) [I. - II.]	46,529,071	40,767,976
IV. Funded Ratio [II. / I.]	9.04%	8.31%
V. Number of Eligible Participants		
A. Actives	761	756
B. Retirees/Disabled & Dependents	<u>423</u>	<u>422</u>
C. Total	1,184	1,178
VI. Service Cost	1,362,396	1,335,205
VII. Financial Statement Expense	4,132,326	3,252,769
VIII. Employer Contribution to the OPEB Trust	(792,000)	(516,121)
IX. Deferred Inflow of Resources	(3,204,621)	(4,000,816)
X. Deferred Outflow of Resources	3,898,314	10,136
XI. Money Weighted Rate of Return	3.22%	8.74%
XII. 20-year Municipal Bond Rate (SAPIHG)	2.66%	2.79%
XIII. Expected Long Term Rate of Return (Net of Expense)	6.74%	7.50%
XIV. Crossover Year	#N/A	N/A
XV. Discount Rate	6.75%	7.50%

## PRINCIPAL RESULTS OF THE VALUATION

### Town of Walpole 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	DPW Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Total OPEB Liability								
A. Actives	2,091,253	22,257,051	2,174,962	1,861,319	92,748	132,059	386,148	28,995,540
B. Retirees/Disabled	<u>2,215,150</u>	<u>14,125,645</u>	<u>2,398,119</u>	<u>1,997,428</u>	<u>1,237,976</u>	<u>151,157</u>	<u>33,358</u>	<u>22,158,833</u>
C. Total	4,306,403	36,382,696	4,573,081	3,858,747	1,330,724	283,216	419,506	51,154,373
II. Fiduciary Net Position [Plan Assets]	389,379	3,289,669	413,491	348,902	120,322	25,608	37,931	4,625,302
III. Net OPEB Liability (Asset) [I. - II.]	3,917,024	33,093,027	4,159,590	3,509,845	1,210,402	257,608	381,575	46,529,071
IV. Number of Eligible Participants								
A. Actives	85	561	55	41	2	4	13	761
B. Retirees/Disabled	<u>61</u>	<u>291</u>	<u>26</u>	<u>17</u>	<u>22</u>	<u>5</u>	<u>1</u>	<u>423</u>
C. Total	146	852	81	58	24	9	14	1,184
<b>For the Reporting Date and Fiscal Year Ending June 30, 2020</b>								
V. Service Cost	118,568	936,145	159,066	126,753	1,559	4,362	15,943	1,362,396
VI. Financial Statement Expense	347,418	2,907,705	410,265	337,871	70,174	19,523	39,370	4,132,326
VII. Employer Share of Costs	(320,421)	(1,505,492)	(171,973)	(154,791)	(92,009)	(11,443)	(7,475)	(2,263,604)
VIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(64,525)	(564,541)	(71,928)	(60,406)	(19,486)	(4,352)	(6,762)	(792,000)
IX. Total Employer Contribution [VII. + VIII.]	(384,946)	(2,070,033)	(243,901)	(215,197)	(111,495)	(15,795)	(14,237)	(3,055,604)

PRINCIPAL RESULTS OF THE VALUATION

**Town of Walpole**  
**Assuming Funding - 6.75% 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	12,305,495	12,254,063	24,559,558	2,574,154	14,241,614	16,815,768	41,375,326
B. Spouses	<u>7,214,509</u>	<u>8,304,207</u>	<u>15,518,716</u>	<u>2,116,030</u>	<u>3,227,035</u>	<u>5,343,065</u>	<u>20,861,781</u>
C. Total	19,520,004	20,558,270	40,078,274	4,690,184	17,468,649	22,158,833	62,237,107
<b>Total OPEB Liability</b>							
A. Participants	9,088,834	8,750,697	17,839,531	2,574,154	14,241,614	16,815,768	34,655,299
B. Spouses	<u>5,259,611</u>	<u>5,896,398</u>	<u>11,156,009</u>	<u>2,116,030</u>	<u>3,227,035</u>	<u>5,343,065</u>	<u>16,499,074</u>
C. Total	14,348,445	14,647,095	28,995,540	4,690,184	17,468,649	22,158,833	51,154,373
<b>Service Cost</b>							
A. Participants	385,201	447,509	832,710	0	0	0	832,710
B. Spouses	<u>225,026</u>	<u>304,660</u>	<u>529,686</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>529,686</u>
C. Total	610,227	752,169	1,362,396	0	0	0	1,362,396

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	1,362,396
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	3,353,420
III. Deferred (Inflows)/Outflows from Plan Experience*	(927,402)
IV. Deferred (Inflows)/Outflows from Changes of Assumptions*	647,035
V. Projected Earnings on OPEB Plan Investments	(275,179)
VI. Deferred (Inflows)/Outflows from Earnings on Plan Investments**	(27,944)
VII. Financial Statement Expense Prior to Plan Design Changes [I. + II.+ III. + IV. + V. + VI.]	4,132,326
VIII. Deferred (Inflows)/Outflows from Plan Design Changes***	0
IX. Financial Statement Expense [VII. + VIII.]	4,132,326

\* Amortized over 6.85 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
I.	Balances for June 30, 2019	44,461,213	2,883,904	41,577,309
II.	Prior Period Adjustment	0	809,333	(809,333)
III.	Balances for June 30, 2019 with Adjustment [I. + II.]	44,461,213	3,693,237	40,767,976
Changes for the year:				
IV.	Service Cost	1,362,396	0	1,362,396
V.	Interest on Total OPEB Liability, Service Cost, and Benefit Payments	3,353,420	0	3,353,420
VI.	Changes in Benefit Terms *	0	0	0
VII.	Change in Assumptions **	4,432,190	0	4,432,190
VIII.	Differences Between Actual and Expected Experience **	(191,242)	0	(191,242)
IX.	Net Investment Income	0	140,065	(140,065)
X.	Employer Contributions to Trust	0	3,055,604	(3,055,604)
XI.	Benefit Payments Withdrawn from Trust	0	(2,263,604)	2,263,604
XII.	Benefit Payments Excluding Implicit Cost	(1,616,868)	0	(1,616,868)
XIII.	Implicit Cost Amount	(646,736)	0	(646,736)
XIV.	Total Benefit Payments Including Implicit Cost [XII. + XIII.]	(2,263,604)	0	(2,263,604)
XV.	Administrative Expense	0	0	0
XVI.	Other Charges	0	0	0
XVII.	Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]	6,693,160	932,065	5,761,095
XVIII.	Balances at June 30, 2020 [III.+XVII.]	51,154,373	4,625,302	46,529,071

\* Recognized Immediately

\*\* Amortized over 6.85 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			2020	2021	2022	2023	2024	2025
	Actual & Expected Experience	Recognition Period (Years)	Remaining Balance						
2017									
2018	(5,594,789)	6.22	(2,896,337)	(899,484)	(899,484)	(899,484)	(899,484)	(197,885)	
2019	0	6.22	0	0	0	0	0	0	0
2020	(191,242)	6.85	(163,324)	(27,918)	(27,918)	(27,918)	(27,918)	(27,918)	(27,918)
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			(3,059,661)						
Net increase (decrease) in OPEB Expense				(927,402)	(927,402)	(927,402)	(927,402)	(225,803)	(27,918)

Deferred (Inflows)/Outflows in OPEB Expense Arising from the Recognition of the Effects of Changes in Assumptions									
Fiscal	Differences from			2020	2021	2022	2023	2024	2025
	Changes in Actuarial Assumptions	Recognition Period (years)	Remaining Balance						
2017									
2018	0	6.22	0	0	0	0	0	0	
2019	0	6.22	0	0	0	0	0	0	0
2020	4,432,190	6.85	3,785,155	647,035	647,035	647,035	647,035	647,035	647,035
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			3,785,155						
Net increase (decrease) in OPEB Expense				647,035	647,035	647,035	647,035	647,035	647,035

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			2020	2021	2022	2023	2024	2025
	Actual & Expected Earnings	Recognition Period (years)	Remaining Balance						
2017	25,340	5.00	5,068	5,068	5,068				
2018	(175,742)	5.00	(70,298)	(35,148)	(35,148)	(35,150)			
2019	(124,436)	5.00	(74,662)	(24,887)	(24,887)	(24,887)	(24,888)		
2020	135,114	5.00	108,091	27,023	27,023	27,023	27,023	27,022	
2021									
2022									
2023									
2024									
2025									
2026									
Total Remaining Balance			(31,801)						
Net increase (decrease) in OPEB Expense				(27,944)	(27,944)	(33,014)	2,135	27,022	0

EXHIBIT A

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

3. Changes in Net OPEB Expense (Continued)

<b>Statement of Outflows &amp; Inflows Arising from Current &amp; Prior Reporting Periods for the Measurement Period Ending on June 30, 2020 to be Reported for the Fiscal Year Ending June 30, 2020</b>			
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Total</b>
I. Contributions made subsequent to the Measurement Date	0	0	0
II. Differences Between Actual & Expected Experience	0	(3,059,661)	(3,059,661)
III. Changes of Assumptions	3,785,155	0	3,785,155
IV. Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	<u>113,159</u>	<u>(144,960)</u>	<u>(31,801)</u>
V. Total [I.+II.+III.+IV.]	3,898,314	(3,204,621)	693,693

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	(308,311)
2022	(313,381)
2023	(278,232)
2024	448,254
2025	619,117
Thereafter	526,246

4. Discount Rate

The discount rate used to measure the Total OPEB liability was 6.75% as of June 30, 2020 and 7.50% 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 \$2,263,604. The Town also contributed \$792,000 to an OPEB Trust for a total contribution during the measurement period of \$3,055,604 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	48.25%	Domestic Equity - Large Cap	4.80%
Domestic Equity - Small/Mid Cap	6.50%	Domestic Equity - Small/Mid Cap	5.29%
International Equity - Developed Market	11.75%	International Equity - Developed Market	5.45%
International Equity-Emerging Market	0.00%	International Equity-Emerging Market	6.42%
Domestic Fixed Income	19.00%	Domestic Fixed Income	2.05%
International Fixed Income	2.00%	International Fixed Income	3.00%
Alternatives	8.75%	Alternatives	6.50%
Real Estate	2.75%	Real Estate	6.25%
Cash & Cash Equivalents	1.00%	Cash & Cash Equivalents	0.00%
Total	<u>100.00%</u>		
		I. Real Rate of Return**	4.49%
		II. Inflation Assumption	2.50%
		III. Total Nominal Return [I. + II.]	6.99%
		IV. Investment Expense	0.25%
		V. Net Investment Return* [III.-IV.]	<u>6.74%</u>

\* 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	4,787,117	(3,055,604)	1,731,513	55,771,303	5.48%
June 30, 2019	4,498,251	(2,090,678)	2,407,573	53,657,303	3.90%
June 30, 2018	4,634,657	(2,096,365)	2,538,292	45,486,461	4.61%
June 30, 2017	4,642,589	(2,298,708)	2,343,881	45,154,262	5.09%

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>
<b>I. Total OPEB Liability</b>	45,277,343	51,154,373	58,294,588
<b>II. Fiduciary Net Position</b>	<u>4,625,302</u>	<u>4,625,302</u>	<u>4,625,302</u>
<b>III. Net OPEB Liability (Asset) [I.-II.]</b>	40,652,041	46,529,071	53,669,286
<b>IV. Service Cost</b>	1,097,857	1,362,396	1,714,677

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>
<b>I. Total OPEB Liability</b>	57,400,388	51,154,373	45,244,785
<b>II. Fiduciary Net Position</b>	<u>4,625,302</u>	<u>4,625,302</u>	<u>4,625,302</u>
<b>III. Net OPEB Liability (Asset) [I.-II.]</b>	52,775,086	46,529,071	40,619,483
<b>IV. Service Cost</b>	1,715,021	1,362,396	1,036,266

EXHIBIT A

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

10. Money Weighted Rate of Return

	Plan	Periods	Period
	Investments /	Invested	Weight
	Net External		
	Cash Flows		
I. Beginning value - June 30, 2019	3,693,237	12	1.0000
Monthly net external cash flows:			
July	500,000	11	0.9167
August	0	10	0.8333
September	0	9	0.7500
October	292,000	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	792,000		
III. Earnings and increase in fair value	140,065		
IV. Ending value - June 30, 2020 [I.+II.+III.]	4,625,302		
Money Weighted Rate of Return	3.22%		
Asset Value - June 30, 2020	4,625,302		



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	DPW Employees and Retirees	Sewer Enterprise Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Total OPEB Liability as of June 30, 2020	4,306,403	36,382,696	4,573,081	3,858,747	1,330,724	283,216	419,506	51,154,373
II. Fiduciary Net Position as of June 30, 2020	389,379	3,289,669	413,491	348,902	120,322	25,608	37,931	4,625,302
III. Net OPEB Liability (Asset) as of June 30, 2020 [I. - II.]	3,917,024	33,093,027	4,159,590	3,509,845	1,210,402	257,608	381,575	46,529,071
IV. Service Cost	118,568	936,145	159,066	126,753	1,559	4,362	15,943	1,362,396
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	277,918	2,386,589	303,390	255,149	83,764	18,391	28,219	3,353,420
VI. Projected Earnings on OPEB Plan Investments	(23,112)	(195,748)	(24,629)	(20,774)	(7,129)	(1,523)	(2,264)	(275,179)
VII. Net Recognition of Deferred (Inflows)/Outflows	(25,956)	(219,281)	(27,562)	(23,257)	(8,020)	(1,707)	(2,528)	(308,311)
VIII. Expense Related to Change in Benefit Terms	0	0	0	0	0	0	0	0
IX. Financial Statement Expense [IV. + V. + VII. + VIII.]	347,418	2,907,705	410,265	337,871	70,174	19,523	39,370	4,132,326
X. Employer Share of Costs	(320,421)	(1,505,492)	(171,973)	(154,791)	(92,009)	(11,443)	(7,475)	(2,263,604)
XI. Employer (Payments) Withdrawals to/from OPEB Trust	(64,525)	(564,541)	(71,928)	(60,406)	(19,486)	(4,352)	(6,762)	(792,000)
XII. Total Employer Contribution [X. + XI.]	(384,946)	(2,070,033)	(243,901)	(215,197)	(111,495)	(15,795)	(14,237)	(3,055,604)
XIII. Net OPEB Expense [IX. + XII.]	(37,528)	837,672	166,364	122,674	(41,321)	3,728	25,133	1,076,722

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	(3,059,661)
II. Deferred (Inflow)/Outflow from Investment Experience	(31,801)
III. Deferred (Inflow)/Outflow from Changes in Assumptions	3,785,155
<b>Change in Deferred Inflow/Outflow</b>	
I. Deferred Outflow at the beginning of the period	10,136
II. Deferred Outflow created during the period	4,567,304
III. Deferred Outflow recognized during the period	679,126
IV. Change in Deferred Outflow (II. - III. )	3,888,178
V. Deferred Outflow at end of the period (I. + IV. )	3,898,314
VI. Deferred Inflow at the beginning of the period	(4,000,816)
VII. Deferred Inflow created during the period	(191,242)
VIII. Deferred Inflow recognized during the period	(987,437)
IX. Change in Deferred Inflow (VII. - VIII. )	796,195
X. Deferred Inflow at end of the period (VI. + IX. )	(3,204,621)
<b>Net OPEB Liability</b>	
I. Net OPEB Liability at beginning of period	40,767,976
II. Service Cost	1,362,396
III. Interest on Total OPEB Liability, Service Cost, and Payments	3,353,420
IV. Projected Investment Income	(275,179)
V. Total Employer Contributions	(3,055,604)
VI. Expense Related to Change in Benefit Terms	0
VII. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + IV. + V. + VI. )	1,385,033
VIII. Deferred Outflow created during the period	4,567,304
IX. Deferred Inflow created during the period	(191,242)
X. Net OPEB Liability at end of period (I. + VII. + VIII. + IX. )	46,529,071
<b>Net OPEB Expense</b>	
I. Service Cost	1,362,396
II. Interest on Total OPEB Liability, Service Cost, and Payments	3,353,420
III. Projected Investment Income	(275,179)
IV. Recognition of Deferred (Inflow)/Outflow	(308,311)
V. Expense Related to Change in Benefit Terms	0
VI. Financial Statement Expense (I. + II. + III. + IV. + V. )	4,132,326
VII. Benefit Payments	(2,263,604)
VIII. Contributions to Trust	(792,000)
IX. Total Employer Payments (VII. + VIII. )	(3,055,604)
X. Total Net OPEB Expense under GASB 75 (VI. + IX. )	1,076,722

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:

	Actuarially Determined Contribution - Deficiency / (Excess)			
	<u>June 30, 2020</u>	<u>June 30, 2019</u>	For the Fiscal Year Ending:	
			<u>June 30, 2018</u>	<u>June 30, 2017</u>
I. Service Cost	1,362,396	1,335,205	1,277,708	1,106,196
II. 30 Year Level Dollar Amortization of NOL	<u>3,424,721</u>	<u>3,163,046</u>	<u>3,356,949</u>	<u>3,536,393</u>
III. Actuarial Determined Contribution [I. + II.]	4,787,117	4,498,251	4,634,657	4,642,589
IV. Contributions in Relation to the Actuarially Determined Contribution	<u>(3,055,604)</u>	<u>(2,090,678)</u>	<u>(2,096,365)</u>	<u>(2,298,708)</u>
V. Contribution Deficiency / (Excess) [III. + IV.]	<u>1,731,513</u>	<u>2,407,573</u>	<u>2,538,292</u>	<u>2,343,881</u>
Covered Employee Payroll	55,771,303	53,657,303	45,486,461	45,154,262
Contributions as a % of Covered Employee Payroll	5.48%	3.90%	4.61%	5.09%
Discount Rate	6.75%	7.50%	7.50%	7.50%
Money Weighted Rate of Return	3.22%	8.74%	6.68%	5.87%

## 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	July 1, 2017
GASB 75 Measurement Date	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
For the Reporting Period & Fiscal Year Ending on:	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
<b>Total OPEB Liability</b>	51,154,373	44,461,213	41,683,413	41,973,221
I. Service Cost	1,362,396	1,335,205	1,277,708	1,106,196
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	3,353,420	3,163,046	3,356,949	3,159,201
III. Changes in Benefit Terms	0	0	0	0
IV. Difference Between Expected & Actual Plan Experience	(191,242)	0	(5,594,789)	0
V. Changes of Assumptions	4,432,190	0	0	0
VI. Benefit Payments Excluding Implicit Cost	(1,616,868)	N/A	N/A	N/A
VII. Implicit Cost Amount	(646,736)	N/A	N/A	N/A
VIII. Total Benefit Payments Including Implicit Cost [VI.+VII.]	(2,263,604)	(1,720,451)	(1,646,365)	(1,948,708)
IX. Net Change in OPEB Liability [I.+II.+III.+IV.+V.+VIII.]	6,693,160	2,777,800	(2,606,497)	2,316,689
X. Total OPEB Liability - Beginning of Period	44,461,213	41,683,413	44,289,910	41,973,221
XI. Prior Period Adjustment	0	0	0	0
XII. Total OPEB Liability - Beginning of Period with Adjustment	44,461,213	41,683,413	44,289,910	41,973,221
XIII. Total OPEB Liability - End of Period [IX.+XII.]	51,154,373	44,461,213	41,683,413	44,289,910
<b>Plan Fiduciary Net Position</b>	4,625,302	3,693,237	2,883,904	2,258,162
XIV. Earning from Plan Investments	140,065	304,355	175,742	121,700
XV. Employer Contribution to Trust	3,055,604	2,090,678	2,096,365	2,298,708
XVI. Benefit Payments from Trust, Including Refunds of Member Contributions	(2,263,604)	(1,574,557)	(1,646,365)	(1,948,708)
XVII. Administrative Expense	0	(11,143)	0	(4,381)
XVIII. Other	0	0	0	0
XIX. Net Change in Plan Fiduciary Net Position [XIV.+XV.+XVI.+XVII.+XVIII.]	932,065	809,333	625,742	467,319
XX. Plan Fiduciary Net Position - Beginning of Period	3,693,237	2,883,904	2,258,162	1,790,843
XXI. Prior Period Adjustment	0	0	0	0
XXII. Plan Fiduciary Net Position - Beginning of Period with Adjustment	3,693,237	2,883,904	2,258,162	1,790,843
XXIII. Plan Fiduciary Net Position - End of Period [XIX.+XXII.]	4,625,302	3,693,237	2,883,904	2,258,162
XXIV. Net OPEB Liability [XIII.-XXIII.]	46,529,071	40,767,976	38,799,509	42,031,748
XXV. Plan Fiduciary Net Position as % of Total OPEB Liability [XXIII. / XIII.]	9.04%	8.31%	6.92%	5.10%
XXVI. Covered Employee Payroll	55,771,303	53,657,303	51,842,805	45,154,262
XXVII. Plan NOL as % of Covered Employee Payroll [XXIV. / XXVI.]	83.43%	75.98%	74.84%	93.08%
Single Discount Rate to calculate Plan Liabilities	6.75%	7.50%	7.50%	7.50%

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:	6.74%, 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:	6.75%, 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:	423
Active Employees:	<u>761</u>
Total:	1,184

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

- ✓ Due to the GASB 75 standards the discount rate has been changed from 7.50% to 6.75%

Contributions:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town contributed \$792,000 beyond the pay-as-you-go cost 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 \$2,263,604. \$646,736 of the \$2,263,604 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 - 6.75% 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 an expected 6.74% 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	51,154,373	4,625,302	46,529,071	9.04%	1,362,396	2,263,604	792,000	3,055,604	2,263,604	0	792,000
2021	June 30, 2021	53,502,958	5,711,910	47,791,048	10.68%	1,406,293	2,521,831	750,000	3,271,831	2,521,831	0	750,000
2022	June 30, 2022	55,578,962	6,871,756	48,707,206	12.36%	1,442,663	2,678,899	750,000	3,428,899	2,678,899	0	750,000
2023	June 30, 2023	57,757,429	8,109,775	49,647,654	14.04%	1,483,896	2,923,430	750,000	3,673,430	2,923,430	0	750,000
2024	June 30, 2024	59,933,790	9,431,237	50,502,553	15.74%	1,525,515	3,115,351	750,000	3,865,351	3,115,351	0	750,000
2025	June 30, 2025	62,094,604	10,841,765	51,252,839	17.46%	1,571,201	3,329,497	750,000	4,079,497	3,329,497	0	750,000
2026	June 30, 2026	64,266,944	12,347,363	51,919,581	19.21%	1,619,253	3,509,669	750,000	4,259,669	3,509,669	0	750,000
2027	June 30, 2027	66,411,555	13,954,438	52,457,117	21.01%	1,665,027	3,738,811	750,000	4,488,811	3,738,811	0	750,000
2028	June 30, 2028	68,571,843	15,669,830	52,902,013	22.85%	1,716,370	3,921,389	750,000	4,671,389	3,921,389	0	750,000
2029	June 30, 2029	70,758,139	17,500,839	53,257,300	24.73%	1,775,339	4,073,786	750,000	4,823,786	4,073,786	0	750,000
2030	June 30, 2030	73,101,243	24,259,408	48,841,835	33.19%	1,821,710	4,102,989	5,400,000	9,502,989	4,102,989	0	5,400,000
2031	June 30, 2031	75,358,625	31,473,505	43,885,120	41.76%	1,876,679	4,332,979	5,400,000	9,732,979	4,332,979	0	5,400,000
2032	June 30, 2032	77,697,850	39,173,832	38,524,018	50.42%	1,934,613	4,390,014	5,400,000	9,790,014	4,390,014	0	5,400,000
2033	June 30, 2033	80,040,726	47,393,161	32,647,565	59.21%	1,993,551	4,481,661	5,400,000	9,881,661	4,481,661	0	5,400,000
2034	June 30, 2034	82,359,712	56,166,473	26,193,239	68.20%	2,055,739	4,662,698	5,400,000	10,062,698	4,662,698	0	5,400,000
2035	June 30, 2035	85,010,640	65,531,106	19,479,534	77.09%	2,121,024	4,684,392	5,400,000	10,084,392	4,684,392	0	5,400,000
2036	June 30, 2036	87,618,446	75,526,915	12,091,531	86.20%	2,198,868	4,845,435	5,400,000	10,245,435	4,845,435	0	5,400,000
2037	June 30, 2037	90,349,363	86,196,442	4,152,921	95.40%	2,271,645	4,964,341	5,400,000	10,364,341	4,964,341	0	5,400,000
2038	June 30, 2038	93,432,094	97,585,095	(4,153,001)	104.44%	2,353,043	5,024,816	5,400,000	10,424,816	5,024,816	0	5,400,000
2039	June 30, 2039	96,546,339	101,353,458	(4,807,119)	104.98%	2,440,137	5,158,882	(2,718,745)	2,440,137	5,158,882	0	(2,718,745)
2040	June 30, 2040	99,893,026	105,293,344	(5,400,318)	105.41%	2,527,486	5,326,049	(2,798,563)	2,527,486	5,326,049	0	(2,798,563)
2041	June 30, 2041	103,281,748	109,438,723	(6,156,975)	105.96%	2,620,919	5,477,611	(2,856,692)	2,620,919	5,477,611	0	(2,856,692)
2042	June 30, 2042	106,884,523	113,761,083	(6,876,560)	106.43%	2,718,700	5,674,523	(2,955,823)	2,718,700	5,674,523	0	(2,955,823)
2043	June 30, 2043	110,535,257	118,233,344	(7,698,087)	106.96%	2,825,213	5,917,924	(3,092,711)	2,825,213	5,917,924	0	(3,092,711)
2044	June 30, 2044	114,453,639	122,902,098	(8,448,459)	107.38%	2,936,583	6,130,864	(3,194,281)	2,936,583	6,130,864	0	(3,194,281)
2045	June 30, 2045	118,417,559	127,712,268	(9,294,709)	107.85%	3,055,964	6,417,944	(3,361,980)	3,055,964	6,417,944	0	(3,361,980)
2046	June 30, 2046	122,616,954	132,762,991	(10,146,037)	108.27%	3,177,357	6,620,305	(3,442,948)	3,177,357	6,620,305	0	(3,442,948)
2047	June 30, 2047	127,074,039	138,102,113	(11,028,074)	108.68%	3,311,398	6,804,697	(3,493,299)	3,311,398	6,804,697	0	(3,493,299)
2048	June 30, 2048	131,590,306	143,653,508	(12,063,202)	109.17%	3,451,444	7,087,591	(3,636,147)	3,451,444	7,087,591	0	(3,636,147)
2049	June 30, 2049	136,424,754	149,557,952	(13,133,198)	109.63%	3,596,415	7,253,000	(3,656,585)	3,596,415	7,253,000	0	(3,656,585)
2050	June 30, 2050	141,583,322	155,959,663	(14,376,341)	110.15%	3,752,634	7,313,098	(3,560,464)	3,752,634	7,313,098	0	(3,560,464)
2051	June 30, 2051	146,894,801	162,708,219	(15,813,418)	110.77%	3,912,054	7,554,433	(3,642,379)	3,912,054	7,554,433	0	(3,642,379)

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	55,771,303	0	55,771,303	0	2,263,604	0	2,263,604
June 30, 2021	52,253,519	5,190,923	57,444,442	0	2,521,831	0	2,521,831
June 30, 2022	49,272,065	9,895,710	59,167,775	0	2,678,899	0	2,678,899
June 30, 2023	46,679,447	14,263,361	60,942,808	0	2,923,430	0	2,923,430
June 30, 2024	44,232,331	18,538,761	62,771,092	0	3,115,351	0	3,115,351
June 30, 2025	41,988,310	22,665,915	64,654,225	0	3,329,497	0	3,329,497
June 30, 2026	39,977,647	26,616,205	66,593,852	0	3,509,669	0	3,509,669
June 30, 2027	37,813,773	30,777,895	68,591,668	0	3,738,811	0	3,738,811
June 30, 2028	35,787,030	34,862,388	70,649,418	0	3,921,389	0	3,921,389
June 30, 2029	34,177,766	38,591,135	72,768,901	0	4,073,786	0	4,073,786
June 30, 2030	32,291,881	42,660,087	74,951,968	0	4,102,989	0	4,102,989
June 30, 2031	30,586,146	46,614,381	77,200,527	0	4,314,533	18,446	4,332,979
June 30, 2032	28,979,688	50,536,855	79,516,543	0	4,344,496	45,518	4,390,014
June 30, 2033	27,383,228	54,518,811	81,902,039	0	4,397,951	83,710	4,481,661
June 30, 2034	25,803,827	58,555,273	84,359,100	0	4,524,920	137,778	4,662,698
June 30, 2035	24,287,017	62,602,856	86,889,873	0	4,478,467	205,925	4,684,392
June 30, 2036	23,066,048	66,430,521	89,496,569	0	4,589,409	256,026	4,845,435
June 30, 2037	21,800,476	70,380,990	92,181,466	0	4,647,404	316,937	4,964,341
June 30, 2038	20,664,282	74,282,628	94,946,910	0	4,637,502	387,314	5,024,816
June 30, 2039	19,640,838	78,154,479	97,795,317	0	4,716,047	442,835	5,158,882
June 30, 2040	18,572,570	82,156,607	100,729,177	0	4,821,980	504,069	5,326,049
June 30, 2041	17,679,451	86,071,601	103,751,052	0	4,883,617	593,994	5,477,611
June 30, 2042	16,728,539	90,135,045	106,863,584	0	4,964,757	709,766	5,674,523
June 30, 2043	15,844,487	94,225,005	110,069,492	0	5,068,892	849,032	5,917,924
June 30, 2044	14,988,408	98,383,169	113,371,577	0	5,105,552	1,025,312	6,130,864
June 30, 2045	14,223,178	102,549,546	116,772,724	0	5,182,150	1,235,794	6,417,944
June 30, 2046	13,357,109	106,918,797	120,275,906	0	5,211,941	1,408,364	6,620,305
June 30, 2047	12,543,122	111,341,061	123,884,183	0	5,198,032	1,606,665	6,804,697
June 30, 2048	11,737,111	115,863,597	127,600,708	0	5,259,122	1,828,469	7,087,591
June 30, 2049	10,833,757	120,594,972	131,428,729	0	5,233,904	2,019,096	7,253,000
June 30, 2050	9,936,802	125,434,789	135,371,591	0	5,088,808	2,224,290	7,313,098
June 30, 2051	9,020,664	130,412,075	139,432,739	0	5,088,074	2,466,359	7,554,433
June 30, 2052	8,134,626	135,481,095	143,615,721	0	5,037,571	2,738,192	7,775,763
June 30, 2053	7,298,997	140,625,196	147,924,193	0	4,897,857	3,031,158	7,929,015
June 30, 2054	6,488,595	145,873,324	152,361,919	0	4,836,684	3,360,370	8,197,054
June 30, 2055	5,623,066	151,309,711	156,932,777	0	4,744,309	3,729,086	8,473,395
June 30, 2056	4,724,385	156,916,375	161,640,760	0	4,650,892	4,072,138	8,723,030
June 30, 2057	3,970,591	162,519,392	166,489,983	0	4,632,566	4,444,894	9,077,460
June 30, 2058	3,242,194	168,242,488	171,484,682	0	4,465,721	4,847,142	9,312,863
June 30, 2059	2,601,239	174,027,983	176,629,222	0	4,341,834	5,247,351	9,589,185

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	2,018,825	179,909,274	181,928,099	0	4,229,016	5,667,965	9,896,981
June 30, 2061	1,547,606	185,838,336	187,385,942	0	4,049,105	6,130,194	10,179,299
June 30, 2062	1,197,720	191,809,800	193,007,520	0	3,933,958	6,630,302	10,564,260
June 30, 2063	785,205	198,012,541	198,797,746	0	3,823,860	7,162,661	10,986,521
June 30, 2064	547,122	204,214,556	204,761,678	0	3,675,153	7,742,369	11,417,522
June 30, 2065	339,412	210,565,116	210,904,528	0	3,579,248	8,371,062	11,950,310
June 30, 2066	152,842	217,078,822	217,231,664	0	3,485,410	8,996,930	12,482,340
June 30, 2067	68,814	223,679,800	223,748,614	0	3,365,452	9,663,083	13,028,535
June 30, 2068	30,419	230,430,653	230,461,072	0	3,278,702	10,370,367	13,649,069
June 30, 2069	0	237,374,904	237,374,904	0	3,188,527	11,075,841	14,264,368
June 30, 2070	0	244,496,151	244,496,151	0	3,094,949	11,813,909	14,908,858
June 30, 2071	0	251,831,036	251,831,036	0	2,998,908	12,592,223	15,591,131
June 30, 2072	0	259,385,967	259,385,967	0	2,900,469	13,406,480	16,306,949
June 30, 2073	0	267,167,546	267,167,546	0	2,799,581	14,253,287	17,052,868
June 30, 2074	0	275,182,572	275,182,572	0	2,696,244	15,139,337	17,835,581
June 30, 2075	0	283,438,049	283,438,049	0	2,590,405	16,067,892	18,658,297
June 30, 2076	0	291,941,190	291,941,190	0	2,482,013	17,034,677	19,516,690
June 30, 2077	0	300,699,426	300,699,426	0	2,371,100	18,040,754	20,411,854
June 30, 2078	0	309,720,409	309,720,409	0	2,257,695	19,093,938	21,351,633
June 30, 2079	0	319,012,021	319,012,021	0	2,141,934	20,189,241	22,331,175
June 30, 2080	0	328,582,382	328,582,382	0	2,024,070	21,326,824	23,350,894
June 30, 2081	0	338,439,853	338,439,853	0	1,904,488	22,510,810	24,415,298
June 30, 2082	0	348,593,049	348,593,049	0	1,783,568	23,743,422	25,526,990
June 30, 2083	0	359,050,840	359,050,840	0	1,661,853	25,028,923	26,690,776
June 30, 2084	0	369,822,365	369,822,365	0	1,539,908	26,367,809	27,907,717
June 30, 2085	0	380,917,036	380,917,036	0	1,418,471	27,765,788	29,184,259
June 30, 2086	0	392,344,547	392,344,547	0	1,298,426	29,226,793	30,525,219
June 30, 2087	0	404,114,883	404,114,883	0	1,180,570	30,747,307	31,927,877
June 30, 2088	0	416,238,329	416,238,329	0	1,065,775	32,337,256	33,403,031
June 30, 2089	0	428,725,479	428,725,479	0	954,895	33,996,297	34,951,192
June 30, 2090	0	441,587,243	441,587,243	0	848,722	35,726,624	36,575,346
June 30, 2091	0	454,834,860	454,834,860	0	747,947	37,532,222	38,280,169
June 30, 2092	0	468,479,906	468,479,906	0	653,212	39,415,004	40,068,216
June 30, 2093	0	482,534,303	482,534,303	0	565,051	41,385,066	41,950,117
June 30, 2094	0	497,010,332	497,010,332	0	483,826	43,443,016	43,926,842

**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	3,693,237	2,263,604	792,000	3,055,604	0	2,263,604	2,263,604	140,065	4,625,302
June 30, 2021	4,625,302	2,521,831	682,227	3,204,058	0	2,521,831	2,521,831	306,191	5,613,720
June 30, 2022	5,613,720	2,678,899	624,564	3,303,463	0	2,678,899	2,678,899	399,069	6,637,353
June 30, 2023	6,637,353	2,923,430	574,466	3,497,896	0	2,923,430	2,923,430	466,401	7,678,220
June 30, 2024	7,678,220	3,115,351	528,496	3,643,847	0	3,115,351	3,115,351	535,032	8,741,748
June 30, 2025	8,741,748	3,329,497	487,072	3,816,569	0	3,329,497	3,329,497	605,341	9,834,161
June 30, 2026	9,834,161	3,509,669	450,240	3,959,909	0	3,509,669	3,509,669	677,748	10,962,149
June 30, 2027	10,962,149	3,738,811	413,466	4,152,277	0	3,738,811	3,738,811	752,555	12,128,170
June 30, 2028	12,128,170	3,921,389	379,908	4,301,297	0	3,921,389	3,921,389	830,033	13,338,111
June 30, 2029	13,338,111	4,073,786	352,257	4,426,043	0	4,073,786	4,073,786	910,666	14,601,034
June 30, 2030	14,601,034	4,102,989	2,326,505	6,429,494	0	4,102,989	4,102,989	1,061,235	17,988,774
June 30, 2031	17,988,774	4,314,533	2,139,431	6,453,964	0	4,314,533	4,314,533	1,283,367	21,393,126
June 30, 2032	21,393,126	4,344,496	1,968,022	6,312,518	0	4,344,496	4,344,496	1,507,138	24,822,768
June 30, 2033	24,822,768	4,397,951	1,805,443	6,203,394	0	4,397,951	4,397,951	1,732,906	28,277,407
June 30, 2034	28,277,407	4,524,920	1,651,756	6,176,676	0	4,524,920	4,524,920	1,960,654	31,752,039
June 30, 2035	31,752,039	4,478,467	1,509,381	5,987,848	0	4,478,467	4,478,467	2,190,124	35,245,619
June 30, 2036	35,245,619	4,589,409	1,391,748	5,981,157	0	4,589,409	4,589,409	2,421,692	38,803,033
June 30, 2037	38,803,033	4,647,404	1,277,074	5,924,478	0	4,647,404	4,647,404	2,657,660	42,420,830
June 30, 2038	42,420,830	4,637,502	1,175,258	5,812,760	0	4,637,502	4,637,502	2,898,124	46,106,898
June 30, 2039	46,106,898	4,716,047	1,084,515	5,800,562	0	4,716,047	4,716,047	3,143,557	49,892,135
June 30, 2040	49,892,135	4,821,980	995,659	5,817,639	0	4,821,980	4,821,980	3,395,737	53,779,462
June 30, 2041	53,779,462	4,883,617	920,174	5,803,791	0	4,883,617	4,883,617	3,655,240	57,760,882
June 30, 2042	57,760,882	4,964,757	845,322	5,810,079	0	4,964,757	4,964,757	3,921,106	61,817,544
June 30, 2043	61,817,544	5,068,892	777,329	5,846,221	0	5,068,892	5,068,892	4,192,271	65,938,112
June 30, 2044	65,938,112	5,105,552	713,913	5,819,465	0	5,105,552	5,105,552	4,467,895	70,094,608
June 30, 2045	70,094,608	5,182,150	657,732	5,839,882	0	5,182,150	5,182,150	4,746,181	74,262,727
June 30, 2046	74,262,727	5,211,941	599,691	5,811,632	0	5,211,941	5,211,941	5,025,188	78,479,242
June 30, 2047	78,479,242	5,198,032	546,743	5,744,775	0	5,198,032	5,198,032	5,307,626	82,726,946
June 30, 2048	82,726,946	5,259,122	496,709	5,755,831	0	5,259,122	5,259,122	5,592,262	86,987,448
June 30, 2049	86,987,448	5,233,904	445,126	5,679,030	0	5,233,904	5,233,904	5,877,710	91,291,188
June 30, 2050	91,291,188	5,088,808	396,381	5,485,189	0	5,088,808	5,088,808	6,166,166	95,629,445
June 30, 2051	95,629,445	5,088,074	349,355	5,437,429	0	5,088,074	5,088,074	6,457,006	99,969,447
June 30, 2052	99,969,447	5,037,571	305,865	5,343,436	0	5,037,571	5,037,571	6,748,080	104,285,200
June 30, 2053	104,285,200	4,897,857	266,451	5,164,308	0	4,897,857	4,897,857	7,037,655	108,558,148
June 30, 2054	108,558,148	4,836,684	229,968	5,066,652	0	4,836,684	4,836,684	7,324,443	112,752,189
June 30, 2055	112,752,189	4,744,309	193,488	4,937,797	0	4,744,309	4,744,309	7,605,912	116,822,503
June 30, 2056	116,822,503	4,650,892	157,829	4,808,721	0	4,650,892	4,650,892	7,879,069	120,787,263
June 30, 2057	120,787,263	4,632,566	128,784	4,761,350	0	4,632,566	4,632,566	8,145,331	124,616,484
June 30, 2058	124,616,484	4,465,721	102,096	4,567,817	0	4,465,721	4,465,721	8,402,536	128,273,974
June 30, 2059	128,273,974	4,341,834	79,526	4,421,360	0	4,341,834	4,341,834	8,648,302	131,754,451

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 [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, 2060	131,754,451	4,229,016	59,923	4,288,939	0	4,229,016	4,229,016	8,882,236	127,624,000
June 30, 2061	127,624,000	4,049,105	44,598	4,093,703	0	4,049,105	4,049,105	8,603,336	123,645,949
June 30, 2062	123,645,949	3,933,958	33,510	3,967,468	0	3,933,958	3,933,958	8,334,848	119,763,713
June 30, 2063	119,763,713	3,823,860	21,329	3,845,189	0	3,823,860	3,823,860	8,072,781	115,971,739
June 30, 2064	115,971,739	3,675,153	14,429	3,689,582	0	3,675,153	3,675,153	7,816,974	112,317,473
June 30, 2065	112,317,473	3,579,248	8,690	3,587,938	0	3,579,248	3,579,248	7,570,486	108,750,408
June 30, 2066	108,750,408	3,485,410	3,799	3,489,209	0	3,485,410	3,485,410	7,329,903	105,270,155
June 30, 2067	105,270,155	3,365,452	1,661	3,367,113	0	3,365,452	3,365,452	7,095,264	101,906,886
June 30, 2068	101,906,886	3,278,702	713	3,279,415	0	3,278,702	3,278,702	6,868,548	98,629,090
June 30, 2069	98,629,090	3,188,527	0	3,188,527	0	3,188,527	3,188,527	6,647,601	95,440,563
June 30, 2070	95,440,563	3,094,949	0	3,094,949	0	3,094,949	3,094,949	6,432,694	92,345,614
June 30, 2071	92,345,614	2,998,908	0	2,998,908	0	2,998,908	2,998,908	6,224,094	89,346,706
June 30, 2072	89,346,706	2,900,469	0	2,900,469	0	2,900,469	2,900,469	6,021,968	86,446,237
June 30, 2073	86,446,237	2,799,581	0	2,799,581	0	2,799,581	2,799,581	5,826,476	83,646,656
June 30, 2074	83,646,656	2,696,244	0	2,696,244	0	2,696,244	2,696,244	5,637,785	80,950,412
June 30, 2075	80,950,412	2,590,405	0	2,590,405	0	2,590,405	2,590,405	5,456,058	78,360,007
June 30, 2076	78,360,007	2,482,013	0	2,482,013	0	2,482,013	2,482,013	5,281,464	75,877,994
June 30, 2077	75,877,994	2,371,100	0	2,371,100	0	2,371,100	2,371,100	5,114,177	73,506,894
June 30, 2078	73,506,894	2,257,695	0	2,257,695	0	2,257,695	2,257,695	4,954,365	71,249,199
June 30, 2079	71,249,199	2,141,934	0	2,141,934	0	2,141,934	2,141,934	4,802,196	69,107,265
June 30, 2080	69,107,265	2,024,070	0	2,024,070	0	2,024,070	2,024,070	4,657,830	67,083,195
June 30, 2081	67,083,195	1,904,488	0	1,904,488	0	1,904,488	1,904,488	4,521,407	65,178,707
June 30, 2082	65,178,707	1,783,568	0	1,783,568	0	1,783,568	1,783,568	4,393,045	63,395,139
June 30, 2083	63,395,139	1,661,853	0	1,661,853	0	1,661,853	1,661,853	4,272,832	61,733,286
June 30, 2084	61,733,286	1,539,908	0	1,539,908	0	1,539,908	1,539,908	4,160,823	60,193,378
June 30, 2085	60,193,378	1,418,471	0	1,418,471	0	1,418,471	1,418,471	4,057,034	58,774,907
June 30, 2086	58,774,907	1,298,426	0	1,298,426	0	1,298,426	1,298,426	3,961,429	57,476,481
June 30, 2087	57,476,481	1,180,570	0	1,180,570	0	1,180,570	1,180,570	3,873,915	56,295,911
June 30, 2088	56,295,911	1,065,775	0	1,065,775	0	1,065,775	1,065,775	3,794,344	55,230,136
June 30, 2089	55,230,136	954,895	0	954,895	0	954,895	954,895	3,722,511	54,275,241
June 30, 2090	54,275,241	848,722	0	848,722	0	848,722	848,722	3,658,151	53,426,519
June 30, 2091	53,426,519	747,947	0	747,947	0	747,947	747,947	3,600,947	52,678,572
June 30, 2092	52,678,572	653,212	0	653,212	0	653,212	653,212	3,550,536	52,025,360
June 30, 2093	52,025,360	565,051	0	565,051	0	565,051	565,051	3,506,509	51,460,309
June 30, 2094	51,460,309	483,826	0	483,826	0	483,826	483,826	3,468,425	50,976,483

## 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 [6.74%]	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 [6.74%]	
June 30, 2020	3,693,237	2,263,604	2,263,604	0	2,263,604	0	2,263,604	Sum of Column V.
June 30, 2021	4,625,302	2,521,831	2,521,831	0	2,362,592	0	2,362,592	59,815,886
June 30, 2022	5,613,720	2,678,899	2,678,899	0	2,351,267	0	2,351,267	
June 30, 2023	6,637,353	2,923,430	2,923,430	0	2,403,871	0	2,403,871	Sum of Column VI.
June 30, 2024	7,678,220	3,115,351	3,115,351	0	2,399,928	0	2,399,928	0
June 30, 2025	8,741,748	3,329,497	3,329,497	0	2,402,938	0	2,402,938	
June 30, 2026	9,834,161	3,509,669	3,509,669	0	2,373,029	0	2,373,029	Sum of Column VII.
June 30, 2027	10,962,149	3,738,811	3,738,811	0	2,368,335	0	2,368,335	[V. + VI.]
June 30, 2028	12,128,170	3,921,389	3,921,389	0	2,327,139	0	2,327,139	59,815,886
June 30, 2029	13,338,111	4,073,786	4,073,786	0	2,264,923	0	2,264,923	
June 30, 2030	14,601,034	4,102,989	4,102,989	0	2,137,117	0	2,137,117	
June 30, 2031	17,988,774	4,314,533	4,314,533	0	2,105,400	0	2,105,400	
June 30, 2032	21,393,126	4,344,496	4,344,496	0	1,986,154	0	1,986,154	
June 30, 2033	24,822,768	4,397,951	4,397,951	0	1,883,635	0	1,883,635	
June 30, 2034	28,277,407	4,524,920	4,524,920	0	1,815,642	0	1,815,642	
June 30, 2035	31,752,039	4,478,467	4,478,467	0	1,683,532	0	1,683,532	
June 30, 2036	35,245,619	4,589,409	4,589,409	0	1,616,299	0	1,616,299	
June 30, 2037	38,803,033	4,647,404	4,647,404	0	1,533,374	0	1,533,374	
June 30, 2038	42,420,830	4,637,502	4,637,502	0	1,433,490	0	1,433,490	
June 30, 2039	46,106,898	4,716,047	4,716,047	0	1,365,719	0	1,365,719	
June 30, 2040	49,892,135	4,821,980	4,821,980	0	1,308,222	0	1,308,222	
June 30, 2041	53,779,462	4,883,617	4,883,617	0	1,241,282	0	1,241,282	
June 30, 2042	57,760,882	4,964,757	4,964,757	0	1,182,224	0	1,182,224	
June 30, 2043	61,817,544	5,068,892	5,068,892	0	1,130,804	0	1,130,804	
June 30, 2044	65,938,112	5,105,552	5,105,552	0	1,067,063	0	1,067,063	
June 30, 2045	70,094,608	5,182,150	5,182,150	0	1,014,682	0	1,014,682	
June 30, 2046	74,262,727	5,211,941	5,211,941	0	956,076	0	956,076	
June 30, 2047	78,479,242	5,198,032	5,198,032	0	893,315	0	893,315	
June 30, 2048	82,726,946	5,259,122	5,259,122	0	846,743	0	846,743	
June 30, 2049	86,987,448	5,233,904	5,233,904	0	789,472	0	789,472	
June 30, 2050	91,291,188	5,088,808	5,088,808	0	719,118	0	719,118	
June 30, 2051	95,629,445	5,088,074	5,088,074	0	673,613	0	673,613	
June 30, 2052	99,969,447	5,037,571	5,037,571	0	624,814	0	624,814	
June 30, 2053	104,285,200	4,897,857	4,897,857	0	569,126	0	569,126	
June 30, 2054	108,558,148	4,836,684	4,836,684	0	526,530	0	526,530	
June 30, 2055	112,752,189	4,744,309	4,744,309	0	483,861	0	483,861	
June 30, 2056	116,822,503	4,650,892	4,650,892	0	444,383	0	444,383	
June 30, 2057	120,787,263	4,632,566	4,632,566	0	414,682	0	414,682	
June 30, 2058	124,616,484	4,465,721	4,465,721	0	374,505	0	374,505	
June 30, 2059	128,273,974	4,341,834	4,341,834	0	341,124	0	341,124	

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 [6.74%]	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 [6.74%]
June 30, 2060	131,754,451	4,229,016	4,229,016	0	311,280	0	311,280
June 30, 2061	127,624,000	4,049,105	4,049,105	0	279,218	0	279,218
June 30, 2062	123,645,949	3,933,958	3,933,958	0	254,148	0	254,148
June 30, 2063	119,763,713	3,823,860	3,823,860	0	231,437	0	231,437
June 30, 2064	115,971,739	3,675,153	3,675,153	0	208,391	0	208,391
June 30, 2065	112,317,473	3,579,248	3,579,248	0	190,138	0	190,138
June 30, 2066	108,750,408	3,485,410	3,485,410	0	173,461	0	173,461
June 30, 2067	105,270,155	3,365,452	3,365,452	0	156,915	0	156,915
June 30, 2068	101,906,886	3,278,702	3,278,702	0	143,218	0	143,218
June 30, 2069	98,629,090	3,188,527	3,188,527	0	130,484	0	130,484
June 30, 2070	95,440,563	3,094,949	3,094,949	0	118,657	0	118,657
June 30, 2071	92,345,614	2,998,908	2,998,908	0	107,715	0	107,715
June 30, 2072	89,346,706	2,900,469	2,900,469	0	97,601	0	97,601
June 30, 2073	86,446,237	2,799,581	2,799,581	0	88,257	0	88,257
June 30, 2074	83,646,656	2,696,244	2,696,244	0	79,633	0	79,633
June 30, 2075	80,950,412	2,590,405	2,590,405	0	71,676	0	71,676
June 30, 2076	78,360,007	2,482,013	2,482,013	0	64,340	0	64,340
June 30, 2077	75,877,994	2,371,100	2,371,100	0	57,584	0	57,584
June 30, 2078	73,506,894	2,257,695	2,257,695	0	51,367	0	51,367
June 30, 2079	71,249,199	2,141,934	2,141,934	0	45,656	0	45,656
June 30, 2080	69,107,265	2,024,070	2,024,070	0	40,420	0	40,420
June 30, 2081	67,083,195	1,904,488	1,904,488	0	35,630	0	35,630
June 30, 2082	65,178,707	1,783,568	1,783,568	0	31,261	0	31,261
June 30, 2083	63,395,139	1,661,853	1,661,853	0	27,288	0	27,288
June 30, 2084	61,733,286	1,539,908	1,539,908	0	23,689	0	23,689
June 30, 2085	60,193,378	1,418,471	1,418,471	0	20,443	0	20,443
June 30, 2086	58,774,907	1,298,426	1,298,426	0	17,532	0	17,532
June 30, 2087	57,476,481	1,180,570	1,180,570	0	14,934	0	14,934
June 30, 2088	56,295,911	1,065,775	1,065,775	0	12,630	0	12,630
June 30, 2089	55,230,136	954,895	954,895	0	10,602	0	10,602
June 30, 2090	54,275,241	848,722	848,722	0	8,828	0	8,828
June 30, 2091	53,426,519	747,947	747,947	0	7,289	0	7,289
June 30, 2092	52,678,572	653,212	653,212	0	5,963	0	5,963
June 30, 2093	52,025,360	565,051	565,051	0	4,833	0	4,833
June 30, 2094	51,460,309	483,826	483,826	0	3,877	0	3,877



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 & \$5,000 Life Insurance offered through Blue Cross Blue shield of Massachusetts.
<u>Medicare Part B</u>	Medicare Part B Premium reimbursements by the Town were not reflected in this valuation. Medicare Part B Penalty reimbursements have been reflected.
<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>• Participants hired before January 1, 2003 pay 20%</li> <li>• Clerical, DPW, Fire, and Library union participants hired after November 1, 2014 pay 40%</li> <li>• Town and School non-union participants hired after November 1, 2014 pay 40%</li> <li>• Police participants hired after May 18, 2015 and all Dispatch participants pay 40%</li> <li>• Cafeteria and Teacher's Aid participants hired after July 1, 2015 pay 40%</li> <li>• Custodian, Secretarial, and Teacher's union participants hired after November 1, 2016 pay 40%</li> <li>• Participants who retire before the above dates but after January 1, 2003 pay 30%</li> <li>• Retirees in Medicare Supplement plans pay 50%</li> </ul>	<ul style="list-style-type: none"> <li>• Participants hired before January 1, 2003 pay 20%</li> <li>• Clerical, DPW, Fire, and Library union participants hired after November 1, 2014 pay 40%</li> <li>• Town and School non-union participants hired after November 1, 2014 pay 40%</li> <li>• Police participants hired after May 18, 2015 and all Dispatch participants pay 40%</li> <li>• Cafeteria and Teacher's Aid participants hired after July 1, 2015 pay 40%</li> <li>• Custodian, Secretarial, and Teacher's union participants hired after November 1, 2016 pay 40%</li> <li>• Participants who retire before the above dates but after January 1, 2003 pay 30%</li> <li>• Retirees in Medicare Supplement plans pay 50%</li> </ul>
<b>Dental</b>	100%	100%
<b>Life</b>	50%	N/A

### APPENDIX III - ACTUARIAL METHODS & ASSUMPTIONS

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

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

6.75% per annum (previously 7.50%, used in the calculation of the Interest Cost)

Net Long Term Rate of Return

6.74% (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**

Service	Male	Female
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**

Service	Male	Female
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 & ASSUMPTIONSTrend 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%.

**Non-Medicare 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	51,154,373	44,461,213
II. Total OPEB Liability (Excluding Implicit Subsidy)	<u>41,179,149</u>	N/A
III. Liability from Implicit Subsidy [I. - II.]	9,975,224	N/A
	<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)	2,263,604	1,720,451
V. Actual Employer Payments	<u>1,616,868</u>	N/A
VI. Implicit Subsidy [IV. - V.]	646,736	N/A

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	4,394	2,770	44 & Under	8,636	5,659	65 to 69	4,165	4,165
25 to 29	6,482	2,882	45 to 49	9,486	7,145	70 to 74	4,165	4,165
30 to 34	8,191	3,618	50 to 54	11,159	9,410	75 to 79	4,165	4,165
35 to 39	8,438	4,542	55 to 59	12,901	12,234	80 to 84	4,165	4,165
40 to 44	8,636	5,659	60 to 64	15,351	15,699	85 to 89	4,165	4,165
45 to 49	9,486	7,145	65 to 69	18,402	19,583	90 & Over	4,165	4,165
50 to 54	11,159	9,410	70 to 74	21,701	23,468			
55 to 59	12,901	12,234	75 to 79	25,202	27,717			
60 to 64	15,351	15,699	80 to 84	28,896	31,858			
65 to 69	18,402	19,583	85 to 89	32,984	36,466			
70 & Over	21,701	23,468	90 & Over	32,984	36,466			

\*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
A. Average Age at Hire	36.07
B. Average Service	<u>9.61</u>
C. Average Current Age	45.68

### Retired Employees & Spouses

Valuation Date	July 1, 2019
A. Under Age 65	90
B. Age 65 & Over	<u>333</u>
C. Total	423

### 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	30									30
25-29	62	4								66
30-34	52	34	5							91
35-39	31	18	30	1						80
40-44	37	12	16	18						83
45-49	28	23	18	14	10	6				99
50-54	23	28	25	15	12	10	2			115
55-59	14	28	20	20	11	7	6			106
60-64	9	10	10	16	9	1	5		1	61
65-69	1	3	5	6	2	2	2			21
70+	2		1	3	2		1			9
<b>Total</b>	289	160	130	93	46	26	16		1	761

APPENDIX IV - PLAN DEMOGRAPHICS

Plan Offerings

	Number of Contracts			
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
Networld Blue \$100	165		347	512
Networld Blue \$500	31			31
Blue Care Elect	3		2	5
Medex	243	40		283
Total	442	40	349	831

	Per Contract Costs (monthly)		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Networld Blue \$100	823.61		2,162.95
Networld Blue \$500	750.43		1,970.78
Blue Care Elect	909.69		2,388.96
Medex	347.06	694.12	
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.