

January 11, 2019

Personal and Confidential

Ms. Mary Bousquet
Treasurer/Collector
Town of Holliston
703 Washington Street
Holliston, MA 01746

Re: GASB 74/75 - Summary of Results

Dear Ms. Bousquet:

The purpose of this letter is to summarize our actuarial valuation of the Town of Holliston Other Postemployment Benefits Plan (the "Plan") for the Reporting Date and fiscal year ending June 30, 2018 with a Valuation Date of July 1, 2017 and a Measurement Date of June 30, 2018 in accordance with Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75").

What caused plan liabilities to change from FY 17 to FY 18?

For the year ending on the Measurement Date of June 30, 2018, the Plan saw an experience the Plan saw a gain of \$86,562 or 0.28% of the beginning Total OPEB Liability ("TOL"). This was mainly due to premiums increasing less than the expected 10% increase. This was mostly offset by an increase in the number of eligible participants.

The TOL went from \$31,172,639 as of June 30, 2017 to \$36,157,159 as of June 30, 2018 for an increase of \$4,984,520. The Financial Statement Expense was \$2,932,942 for the year ending on the June 30, 2018 Measurement Date. As this is the first year using GASB 75 methodology, there is no baseline for comparison.

If you or your auditors have questions on this report, feel free to give us a call.

Sincerely,



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

**Town of Holliston Other
Postemployment Benefits Plan**

GASB 74/75 Actuarial Valuation

With a Valuation Date of July 1, 2017

As of the Measurement Date:
June 30, 2018

As of the Measurement Date:
June 30, 2019

&

For the Reporting Date:
June 30, 2018

For the Reporting Date:
June 30, 2019

Delivered January 11, 2019

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January 11, 2019

Personal and Confidential

Ms. Mary Bousquet
Treasurer/Collector
Town of Holliston
703 Washington Street
Holliston, MA 01746

Dear Ms. Bousquet:

We have performed an actuarial valuation of the Town of Holliston Other Postemployment Benefits Plan for the Reporting Date & fiscal year ending June 30, 2018 with a Measurement Date of June 30, 2018 and a Valuation Date of July 1, 2017. The figures presented in this report reflect the adoption, by the Town of Holliston, 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,



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

January 11, 2019

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Holliston other postemployment benefit programs with a Valuation Date of July 1, 2017 with a Measurement Date of June 30, 2018 for the Reporting Date & fiscal year ending June 30, 2018 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.



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

EXECUTIVE SUMMARY

What caused plan liabilities to change from FY 17 to FY 18?

For the year ending on the Measurement Date of June 30, 2018, the Plan saw a gain of \$86,562 or 0.28% of the beginning Total OPEB Liability ("TOL"). This was mainly due to premiums increasing less than the expected 10% increase. This was mostly offset by an increase in the number of eligible participants.

Assumption changes

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

- ✓ Retirement rates for teachers have been updated increasing the disclosed liability by \$3.5 million.
- ✓ Assumption changes caused Normal Cost to increase by \$120 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.

Recognition Period

- ✓ Changes in assumptions & plan experience are amortized into the net OPEB expense over time until fully recognized
- ✓ Changes in benefit terms are to be recognized in full immediately

EXECUTIVE SUMMARY

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.

Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare Integrated) plans - represent 76% of the total plan liabilities
- ✓ Age at which plan participants retire
- ✓ Percentage of plan participants who elect coverage for themselves and/or a spouse
- ✓ Medical care cost inflation rate – We currently assume medical costs increase at 5.0% per year
- ✓ Discount Rate (7.00%) – 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

Discount Rate Determinants

1. Employer Current and Future Benefit Payments
2. Municipal Bond Rate – The municipal bond rate was 3.45% as of June 30, 2018.
3. Current Asset Level – The Town currently has \$11,475,444 in assets.
4. Funding Policy - The Town is expected to contribute \$1.5 million per year.
5. Investment Policy - The Town is expected to earn 7.04% on assets based on its investment policy.

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, 2017	June 30, 2016
Measurement Date & Period Ending	June 30, 2018	June 30, 2017
Reporting Date/Fiscal Year End	June 30, 2018	June 30, 2017
Total OPEB Liability	36,157,159	31,172,639
Per Eligible Active Plan Participant	34,526	31,063
Per Retiree/Spouse Plan Participant	42,284	41,180
Total Annual Service Cost (annual benefit accrual)	928,906	965,170
Per Eligible Active Plan Participant	1,551	1,681
Expected Employer Share of Retiree Costs	1,540,182	1,455,576
Per Retiree/Spouse Plan Participant	4,208	4,493
Net OPEB Liability as a % of Payroll	72.20%	63.00%
Average Annual Medical Plan Premium (Single Coverage)	6,302	7,357
Average Annual Medical Plan Premium (Family Coverage)	24,221	24,506
<u>Projected 2022 Excise Tax Thresholds</u>		
Annual Medical Plan Premium (Single Coverage)	12,511	
Annual Medical Plan Premium (Family Coverage)	32,676	

EXECUTIVE SUMMARY

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.

Impact of Implicit Subsidy		
	As of the Measurement Date	
Impact on Liability	<u>June 30, 2018</u>	<u>June 30, 2017</u>
I. Actuarial Accrued Liability	36,157,159	31,172,639
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>32,904,072</u>	<u>N/A</u>
III. Liability from Implicit Subsidy [I. - II.]	3,253,087	N/A

	For the Measurement Period Ending	
Impact on Payments	<u>June 30, 2018</u>	<u>June 30, 2017</u>
IV. Employer Payments (Including Implicit Subsidy)	1,540,182	1,455,576
V. Actual Employer Payments	<u>1,354,086</u>	<u>N/A</u>
VI. Implicit Subsidy [IV. - V.]	186,096	N/A

PRINCIPAL RESULTS OF THE VALUATION

Town of Holliston Assuming Funding - 7.00% discount rate Comparison of Plan Liabilities to Prior Valuation

Valuation Date	July 1, 2017	June 30, 2016
For the Measurement Period ending on the Measurement Date of:	June 30, 2018	June 30, 2017
For the Reporting Period & Fiscal Year ending on:	June 30, 2018	June 30, 2017
I. Present Value of Future Benefits		
A. Actives	28,095,513	N/A
B. Retirees/Disabled	<u>15,475,945</u>	<u>N/A</u>
C. Total	43,571,458	N/A
II. Present Value of Future Normal Cost	7,414,299	N/A
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	20,681,214	17,830,162
B. Retirees/Disabled	<u>15,475,945</u>	<u>13,342,477</u>
C. Total	36,157,159	31,172,639
IV. Fiduciary Net Position [Plan Assets]	11,475,444	9,002,047
V. Net OPEB Liability (Asset) [III. - IV.]	24,681,715	22,170,592
VI. Funded Ratio [IV. / III.]	31.74%	28.88%
VII. Annual Covered Payroll	34,177,472	35,188,394
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	72.2%	63.0%
IX. Number of Eligible Participants		
A. Actives	599	574
B. Retirees/Disabled	<u>366</u>	<u>324</u>
C. Total	965	898
X. Service Cost	928,906	965,170
XI. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	2,194,113	2,087,749
XII. Projected Earnings on OPEB Plan Investments	(685,646)	N/A
XIII. Net Recognition of Deferred (Inflows)/Outflows	<u>495,569</u>	<u>N/A</u>
XIV. Financial Statement Expense [X.+XI.+XII.+XIII.]	2,932,942	N/A
XV. Employer Share of Costs	(1,540,182)	(1,455,576)
XVI. Employer (Payments)/Withdrawals to/from OPEB Trust	<u>(1,500,000)</u>	<u>(1,500,000)</u>
XVII. Total Employer Contribution [XV. + XVI.]	(3,040,182)	(2,955,576)
XVIII. Other Changes	<u>0</u>	<u>0</u>
XIX. Net OPEB Expense [XIV.+XVII.+XVIII.]	(107,240)	N/A
XX. Discount Rate	7.00%	7.00%



East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

PRINCIPAL RESULTS OF THE VALUATION

Town of Holliston
Plan Liabilities as of the June 30, 2018 Measurement Date
Assuming Funding - 7.00% discount rate

	Town Employees and Retirees	School Employees and Retirees	Public Safety Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits					
A. Actives	2,122,560	21,090,936	4,468,693	413,324	28,095,513
B. Retirees/Disabled	<u>3,300,074</u>	<u>11,188,649</u>	<u>808,427</u>	<u>178,795</u>	<u>15,475,945</u>
C. Total	5,422,634	32,279,585	5,277,120	592,119	43,571,458
II. Present Value of Future Normal Cost	589,952	5,769,173	910,869	144,305	7,414,299
III. Total OPEB Liability					
A. Actives	1,532,608	15,321,763	3,557,824	269,019	20,681,214
B. Retirees/Disabled	<u>3,300,074</u>	<u>11,188,649</u>	<u>808,427</u>	<u>178,795</u>	<u>15,475,945</u>
C. Total	4,832,682	26,510,412	4,366,251	447,814	36,157,159
IV. Fiduciary Net Position [Plan Assets]	1,534,543	8,410,585	1,388,371	141,945	11,475,444
V. Net OPEB Liability (Asset) [III. - IV.]	3,298,139	18,099,827	2,977,880	305,869	24,681,715
VI. Annual Covered Payroll	2,705,754	27,661,778	3,318,682	491,258	34,177,472
VII. Net OPEB Liability (Asset) as % of Covered Payroll	121.9%	65.4%	89.7%	62.3%	72.2%
VIII. Number of Eligible Participants					
A. Actives	53	452	86	8	599
B. Retirees/Disabled	<u>81</u>	<u>272</u>	<u>7</u>	<u>6</u>	<u>366</u>
C. Total	134	724	93	14	965
For the Reporting Date and Fiscal Year Ending June 30, 2018					
IX. Service Cost	76,763	734,197	103,019	14,927	928,906
X. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	287,457	1,612,038	267,153	27,465	2,194,113
XI. Recognition of Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XII. Recognition of Deferred (Inflows)/Outflows from Expected & Actual Experience	(1,881)	(10,320)	(1,700)	(174)	(14,075)
XIII. Recognition of Deferred (Inflows)/Outflows from Changes in Assumptions	73,574	416,715	69,785	7,120	567,194
XIV. Projected Earnings on OPEB Plan Investments	(91,522)	(502,597)	(83,039)	(8,488)	(685,646)
XV. Recognition of Deferred (Inflows)/Outflows from Earnings on Investments	(7,695)	(42,180)	(6,963)	(712)	(57,550)
XVI. Financial Statement Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.]	336,696	2,207,853	348,255	40,138	2,932,942
XVII. Employer Share of Costs	(293,881)	(1,132,596)	(96,895)	(16,810)	(1,540,182)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(194,575)	(1,102,044)	(184,552)	(18,829)	(1,500,000)
XIX. Total Employer Contribution [XVII. + XVIII.]	(488,456)	(2,234,640)	(281,447)	(35,639)	(3,040,182)
XX. Other Changes	0	0	0	0	0
XXI. Net OPEB Expense [XVI.+XIX.+XX.]	(151,760)	(26,787)	66,808	4,499	(107,240)

PRINCIPAL RESULTS OF THE VALUATION

Town of Holliston Assuming Funding - 7.00% discount rate For the Period ending on the June 30, 2018 Measurement Date

	<u>Present Value of Future</u> <u>Benefits</u>	<u>Total OPEB Liability</u> <u>(Individual Entry Age</u> <u>Normal)</u>	<u>Service Cost</u>
Actives			
Under Age 65			
A. Participants	6,689,482	4,767,032	200,946
B. Spouses	<u>3,105,686</u>	<u>2,309,972</u>	<u>85,185</u>
C. Total	9,795,168	7,077,004	286,131
Age 65 and Over			
A. Participants	11,989,324	9,267,701	425,868
B. Spouses	<u>6,311,021</u>	<u>4,336,509</u>	<u>216,907</u>
C. Total	18,300,345	13,604,210	642,775
Actives Total			
A. Participants	18,678,806	14,034,733	626,814
B. Spouses	<u>9,416,707</u>	<u>6,646,481</u>	<u>302,092</u>
C. Total	28,095,513	20,681,214	928,906
Retirees/Disabled			
Under Age 65			
A. Participants	1,060,164	1,060,164	0
B. Spouses	<u>402,031</u>	<u>402,031</u>	<u>0</u>
C. Total	1,462,195	1,462,195	0
Age 65 and Over			
A. Participants	13,524,435	13,524,435	0
B. Spouses	<u>489,315</u>	<u>489,315</u>	<u>0</u>
C. Total	14,013,750	14,013,750	0
Retirees/Disabled Total			
A. Participants	14,584,599	14,584,599	0
B. Spouses	<u>891,346</u>	<u>891,346</u>	<u>0</u>
C. Total	15,475,945	15,475,945	0
Total Population			
A. Participants	33,263,405	28,619,332	626,814
B. Spouses	<u>10,308,053</u>	<u>7,537,827</u>	<u>302,092</u>
C. Total	43,571,458	36,157,159	928,906

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require the following disclosures in the financial statements related to the retiree medical, dental and life insurance benefits;

1. OPEB EXPENSE DEVELOPMENT

Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2018	
Description	Amount
I. Service Cost	928,906
II. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	2,194,113
III. Deferred (Inflows)/Outflows from Plan Design Changes*	0
IV. Deferred (Inflows)/Outflows from Plan Experience**	(14,075)
V. Deferred (Inflows)/Outflows from Changes of Assumptions**	567,194
VI. Projected earnings on OPEB plan investments	(685,646)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	(57,550)
IX. Financial statement expense [I. + II. + III. + IV. + V. + VI. + VII.]	2,932,942

* Recognized Immediately

** Amortized over 6.15 years

*** Amortized over 5 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 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 at June 30, 2017 GASB 45	35,578,344	9,002,047	26,576,297
II. Change in Assumptions for GASB 75	(4,405,705)	0	(4,405,705)
III. Balances at June 30, 2017 GASB 75 [I. + II.]	31,172,639	9,002,047	22,170,592
Changes for the year:			
IV. Service Cost	928,906	0	928,906
V. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	2,194,113	0	2,194,113
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	3,488,245	0	3,488,245
VIII. Differences between actual and expected experience **	(86,562)	0	(86,562)
IX. Net Investment Income	0	973,397	(973,397)
X. Employer Contributions to Trust	0	3,040,182	(3,040,182)
XI. Benefit Payments Withdrawn from Trust	0	(1,540,182)	1,540,182
XII. Benefit payments excluding Implicit Cost	(1,354,086)	0	(1,354,086)
XIII. Implicit Cost amount	(186,096)	0	(186,096)
XIV. Total Benefit payments including Implicit Cost [XII. + XIII.]	(1,540,182)	0	(1,540,182)
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.]	4,984,520	2,473,397	2,511,123
XVII. Balances at June 30, 2018 [III.+XVII.]	36,157,159	11,475,444	24,681,715

* Recognized Immediately

** Amortized over 6.15 years

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 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 Year	Differences between actual & expected experience	Recognition Period (years)	Remaining Balance	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
2017									
2018	(86,562)	6.15	(72,487)		(14,075)	(14,075)	(14,075)	(14,075)	(14,075)
2019									
2020									
2021									
2022									
2023									
2024									
2025									
2026									
Net increase (decrease) in OPEB expense				0	(14,075)	(14,075)	(14,075)	(14,075)	(14,075)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of Changes in Assumptions									
Fiscal Year	Differences from changes in Actuarial Assumptions	Recognition Period (years)	Remaining Balance	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
2017									
2018	3,488,245	6.15	2,921,051		567,194	567,194	567,194	567,194	567,194
2019									
2020									
2021									
2022									
2023									
2024									
2025									
2026									
Net increase (decrease) in OPEB expense				0	567,194	567,194	567,194	567,194	567,194

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 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 Year	Differences between actual & expected earnings	Recognition Period (years)	Remaining Balance	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
2017									
2018	(287,751)	5.00	(230,201)		(57,550)	(57,550)	(57,550)	(57,550)	(57,551)
2019									
2020									
2021									
2022									
2023									
2024									
2025									
2026									
Net increase (decrease) in OPEB expense				0	(57,550)	(57,550)	(57,550)	(57,550)	(57,551)

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 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 Year	Differences between actual & expected earnings	Recognition Period (years)	Remaining Balance	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
2017									
2018	(287,751)	5.00	(230,201)		(57,550)	(57,550)	(57,550)	(57,550)	(57,551)
2019									
2020									
2021									
2022									
2023									
2024									
2025									
2026									
Net increase (decrease) in OPEB expense				0	(57,550)	(57,550)	(57,550)	(57,550)	(57,551)

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

4. 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, 2018 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$1,540,182. The Town also made a contribution to an OPEB Trust of \$1,500,000 for a total contribution during the measurement period of \$3,040,182 to be reported on the financial statement for the fiscal year ending June 30, 2018.

5. 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	14.50%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	3.50%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	16.00%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	6.00%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	20.00%	Domestic Fixed Income	2.00%
International Fixed Income	3.00%	International Fixed Income	3.00%
Alternatives	23.00%	Alternatives	6.50%
Real Estate	14.00%	Real Estate	6.25%
Cash	0.00%	Cash	0.00%
Total	100.00%		
		I. Real Rate of Return	4.79%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	7.54%
		IV. Investment Expense	0.50%
		V. Net Investment Return* [III.-IV.]	7.04%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

6. ACTUARIALLY DETERMINED CONTRIBUTION (ADC)

The Town's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which 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 for the fiscal year and the amount actually contributed to the plan:

Actuarially Determined Contribution - Deficiency / (Excess)	
<u>For the Period Ending on the June 30, 2018 to be Reported on June 30, 2018</u>	
I. Service Cost	928,906
II. 30 year level flat dollar amortization of NOL at 7.00%	<u>1,858,888</u>
III. Actuarial Determined Contribution [I. + II.]	2,787,794
IV. Contributions in relation to the actuarially determined contribution	<u>(3,040,182)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>(252,388)</u>
Covered employee payroll	34,177,472
Contributions as a % of covered employee payroll	8.90%

7. FUNDED STATUS AND FUNDING PROGRESS

Fiscal Year	Measurement Date	Fiduciary Net Position	Total OPEB Liability	Net OPEB Liability	Funded Ratio	Covered Payroll	NOL as a % of Covered Payroll
2015	6/30/2015	\$4,818,613	\$31,923,000	\$27,104,387	15.1%	N/A	N/A
2016	6/30/2016	\$6,426,846	\$33,668,166	\$27,241,320	19.1%	N/A	N/A
2017	6/30/2017	\$9,002,047	\$35,578,344	\$26,576,297	25.3%	N/A	N/A
2018	6/30/2018	\$11,475,444	\$36,157,159	\$24,681,715	31.7%	\$34,177,472	72.2%
2019	6/30/2019 (est.)	\$13,835,217	\$38,068,637	\$24,233,420	36.3%	\$35,202,796	68.8%
2020	6/30/2020 (est.)	\$16,361,118	\$39,368,814	\$23,007,696	41.6%	\$36,258,880	63.5%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

8. EFFECT OF 1% CHANGE IN HEALTHCARE TREND

Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2018 Measurement Date

	<u>1% Decrease (4.00%)</u>	<u>Current Trend Rate (5.00%)</u>	<u>1% Increase (6.00%)</u>
I. Total OPEB Liability	29,145,968	36,157,159	44,769,287
II. Fiduciary Net Position	<u>11,475,444</u>	<u>11,475,444</u>	<u>11,475,444</u>
III. Net OPEB Liability (Asset) [I.-II.]	17,670,524	24,681,715	33,293,843
IV. Service Cost	625,257	928,906	1,331,748

Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2019 Measurement Date

	<u>1% Decrease (4.00%)</u>	<u>Current Trend Rate (5.00%)</u>	<u>1% Increase (6.00%)</u>
I. Total OPEB Liability	30,684,879	38,068,637	47,138,404
II. Fiduciary Net Position	<u>13,835,217</u>	<u>13,835,217</u>	<u>13,835,217</u>
III. Net OPEB Liability (Asset) [I.-II.]	16,849,662	24,233,420	33,303,187
IV. Service Cost	666,660	990,425	1,419,954

9. EFFECT OF 1% CHANGE IN DISCOUNT RATES

Impact of a 1% Change in the Discount Rate as of the June 30, 2018 Measurement Date

	<u>1% Decrease (6.00%)</u>	<u>Current Discount Rate (7.00%)</u>	<u>1% Increase (8.00%)</u>
I. Total OPEB Liability	40,813,777	36,157,159	31,500,541
II. Fiduciary Net Position	<u>11,475,444</u>	<u>11,475,444</u>	<u>11,475,444</u>
III. Net OPEB Liability (Asset) [I.-II.]	29,338,333	24,681,715	20,025,097
IV. Service Cost	1,170,471	928,906	687,341

Impact of a 1% Change in the Discount Rate as of the June 30, 2019 Measurement Date

	<u>1% Decrease (6.00%)</u>	<u>Current Discount Rate (7.00%)</u>	<u>1% Increase (8.00%)</u>
I. Total OPEB Liability	42,971,431	38,068,637	33,165,843
II. Fiduciary Net Position	<u>13,835,217</u>	<u>13,835,217</u>	<u>13,835,217</u>
III. Net OPEB Liability (Asset) [I.-II.]	29,136,214	24,233,420	19,330,626
IV. Service Cost	1,247,988	990,425	732,862

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

10. MONEY WEIGHTED RATE OF RETURN

	Plan Investments / Net External Cash Flows	Periods Invested	Period Weight
I. Beginning value - June 30, 2017	9,002,047	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	1,500,000	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	0	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	0	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
<u>June</u>	<u>0</u>	<u>0</u>	<u>0.0000</u>
II. Total net external cash flow	1,500,000		
III. Earnings and increase in fair value	973,397		
IV. Ending value - June 30, 2018 [I.+II.+III.]	11,475,444		
Money Weighted Rate of Return	9.62%		
Asset Value - June 30, 2018	11,475,444		

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

10. MONEY WEIGHTED RATE OF RETURN (CONTINUED)

Determination of Beginning & Ending Balances of OPEB Plan Investments for Purposes of Calculating the Annual Money-Weighted Rate of Return		
	Assets as of June 30, 2017	Assets as of June 30, 2018
Assets		
Cash and cash equivalents	N/A	N/A
Receivables:		
Investment income	0	0
Receivables from brokers for unsettled trades	0	0
Investments		
Fixed income	N/A	N/A
Stocks	N/A	N/A
Cash and cash equivalents	N/A	N/A
Real estate	N/A	N/A
Alternative investments	N/A	N/A
Invested securities lending cash collateral	0	0
Liabilities		
Securities lending cash collateral	0	0
Payable to brokers for unsettled trades	0	0
Total OPEB plan investments	9,002,047	11,475,444

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

11. FIDUCIARY NET POSITION

Statement of Fiduciary Net Position June 30, 2018 and June 30, 2019		
	<u>June 30, 2018</u>	<u>June 30, 2019 (Projected)</u>
Assets		
I. Cash and cash equivalents	N/A	N/A
<u>Receivables & Prepaid expenses:</u>		
II. Contributions	0	0
III. Investment Income	0	0
IV. Receivables from brokers for unsettled trades	0	0
V. Prepaid expenses	0	0
VI. Total Receivables [II.+III.+IV.+V.]	0	0
<u>OPEB Trust Investments:</u>		
VII. Fixed Income	N/A	N/A
VIII. Stocks	N/A	N/A
IX. Cash and cash equivalents	N/A	N/A
X. Real estate	N/A	N/A
XI. Alternative investments	N/A	N/A
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	11,475,444	13,835,217
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
Total Assets	11,475,444	13,835,217
Liabilities		
XIII. Accrued expenses and benefits payable	0	0
XIV. Securities lending cash collateral	0	0
XV. Payable to brokers for unsettled trades	0	0
XVI. Total liabilities [XIII.+XIV.+XV.]	0	0
XVII. Net Position restricted for OPEB [XII.-XVI.]	11,475,444	13,835,217

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

11. FIDUCIARY NET POSITION (CONTINUED)

Statement of Changes in Fiduciary Net Position	
<u>For the Year Ending on the June 30, 2018 Measurement Date</u>	
Additions	
<u>Contributions</u>	
Employer Contributions to OPEB Trust	<u>1,500,000</u>
Total Contributions	1,500,000
<u>Investment Income / (loss)</u>	
Interest	N/A
Dividends	N/A
Equity fund income, net	N/A
Net increase in fair value of investments	N/A
Securities lending income	N/A
Less investment expenses:	
Direct investment expense	N/A
Securities lending management fees	N/A
Securities lending borrower rebates	<u>N/A</u>
Net investment income	N/A
Total income	<u>973,397</u>
Total Additions	<u>2,473,397</u>
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	<u>0</u>
Total deductions	<u>0</u>
Net increase (decrease)	2,473,397
Net Position restricted for OPEB	
As of June 30, 2017	<u>9,002,047</u>
As of June 30, 2018	<u>11,475,444</u>

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

12. PLAN CASH FLOWS

Aggregate External (Noninvestment Cash Flows)	
<u>For the Year Ending on the June 30, 2018 Measurement Date</u>	
Additions	
<u>Contributions</u>	
Member contributions	0
Employer contributions	1,500,000
Other income	0
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Beginning balances of noninvestment-related assets and liabilities	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Ending balances of noninvestment-related assets and liabilities	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Change in capital assets - depreciation	0
Aggregate external cash flows	1,500,000

EXHIBIT AFINANCIAL STATEMENT DISCLOSURES
(As of the June 30, 2018 Measurement Date)**12. PLAN CASH FLOWS (CONTINUED)**

Reconciliation of Beginning & Ending Balances of OPEB Plan Investments, Aggregate External Cash Flows, and Net Investment Income	
<u>For the Year Ending on the June 30, 2018 Measurement Date</u>	
I. Total OPEB plan investments on June 30, 2017	9,002,047
II. Aggregate external cash flows	1,500,000
III. Net investment income	<u>973,397</u>
IV. Total OPEB plan investments on June 30, 2018 [I.+II.+III.]	<u>11,475,444</u>

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

13. OPEB LIABILITY, OPEB EXPENSE AND ADC

	Fiscal Year Ending June 30, 2018				
	Town Employees and Retirees	School Employees and Retirees	Public Safety Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Total OPEB Liability as of June 30, 2018	4,832,682	26,510,412	4,366,251	447,814	36,157,159
II. Fiduciary Net Position as of June 30, 2018	1,534,543	8,410,585	1,388,371	141,945	11,475,444
III. Net OPEB Liability (Asset) as of June 30, 2018 [I. - II.]	3,298,139	18,099,827	2,977,880	305,869	24,681,715
IV. Service Cost	76,763	734,197	103,019	14,927	928,906
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	287,457	1,612,038	267,153	27,465	2,194,113
VI. Projected Earnings on OPEB Plan Investments	(91,522)	(502,597)	(83,039)	(8,488)	(685,646)
VII. Net Recognition of Deferred (Inflows)/Outflows	63,998	364,215	61,122	6,234	495,569
VIII. Financial Statement Expense [IV. + V. + VI. + VII.]	336,696	2,207,853	348,255	40,138	2,932,942
IX. Employer Share of Costs	(293,881)	(1,132,596)	(96,895)	(16,810)	(1,540,182)
X. Employer (Payments) Withdrawals to/from OPEB Trust	(194,575)	(1,102,044)	(184,552)	(18,829)	(1,500,000)
XI. Total Employer Contribution [IX. + X.]	(488,456)	(2,234,640)	(281,447)	(35,639)	(3,040,182)
XII. Net OPEB Expense [VIII. + XI.]	(151,760)	(26,787)	66,808	4,499	(107,240)
XIII. Actuarial Determined Contribution (ADC)	325,160	2,097,375	327,296	37,963	2,787,794
XIV. Total Expected Contribution	488,456	2,234,640	281,447	35,639	3,040,182
XV. Percentage of ADC Contributed [XIV. / XIII.]	150%	107%	86%	94%	109%

	Fiscal Year Ending June 30, 2019				
	Town Employees and Retirees	School Employees and Retirees	Public Safety Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Total OPEB Liability as of June 30, 2019	4,938,124	27,968,877	4,683,773	477,863	38,068,637
II. Fiduciary Net Position as of June 30, 2019	1,843,883	10,142,866	1,677,050	171,418	13,835,217
III. Net OPEB Liability (Asset) as of June 30, 2019 [I. - II.]	3,094,241	17,826,011	3,006,723	306,445	24,233,420
IV. Service Cost	81,846	782,821	109,842	15,916	990,425
V. Interest on Total OPEB Liability (Asset), Service Cost, and Benefit Payments	333,359	1,869,450	309,812	31,851	2,544,472
VI. Projected Earnings on OPEB plan investments	(114,765)	(630,237)	(104,127)	(10,644)	(859,773)
VII. Net Recognition of Deferred (Inflows)/Outflows	64,228	364,113	61,004	6,224	495,569
VIII. Financial Statement Expense [IV. + V. + VI. + VII.]	364,668	2,386,147	376,531	43,347	3,170,693
IX. Employer Share of Costs	(309,763)	(1,193,806)	(102,132)	(17,718)	(1,623,419)
X. Employer (Payments) Withdrawals to/from OPEB Trust	(194,575)	(1,102,044)	(184,552)	(18,829)	(1,500,000)
XI. Total Employer Contribution [IX. + X.]	(504,338)	(2,295,850)	(286,684)	(36,547)	(3,123,419)
XII. Net OPEB Expense [VIII. + XI.]	(139,670)	90,297	89,847	6,800	47,274
XIII. Actuarial Determined Contribution (ADC)	314,887	2,125,376	336,292	38,996	2,815,551
XIV. Total Expected Contribution	504,338	2,295,850	286,684	36,547	3,123,419
XV. Percentage of ADC Contributed [XIV. / XIII.]	160%	108%	85%	94%	111%

EXHIBIT A

FINANCIAL STATEMENT DISCLOSURES (As of the June 30, 2018 Measurement Date)

14. OPEB LIABILITY, OPEB EXPENSE AND DEFERRED INFLOW/OUTFLOW

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

Source of Deferred Inflow/Outflow		
I. Deferred (Inflow)/Outflow from Actual vs. Expected Experience	(72,487)	(58,412)
II. Deferred (Inflow)/Outflow from Investment Experience	(230,201)	(172,651)
III. Deferred (Inflow)/Outflow from Changes in Benefit Terms	0	0
IV. Deferred (Inflow)/Outflow from Changes in Assumptions	2,921,051	2,353,857

Change in Deferred Inflow/Outflow		
I. Deferred Outflow at the beginning of the period	0	2,921,051
II. Deferred Outflow created during the period	3,488,245	0
III. Deferred Outflow recognized during the period	567,194	567,194
IV. Change in Deferred Outflow (II. - III.)	2,921,051	(567,194)
V. Deferred Outflow at end of the period (I. + IV.)	2,921,051	2,353,857
VI. Deferred Inflow at the beginning of the period	0	(302,688)
VII. Deferred Inflow created during the period	(374,313)	0
VIII. Deferred Inflow recognized during the period	(71,625)	(71,625)
IX. Change in Deferred Inflow (VII. - VIII.)	(302,688)	71,625
X. Deferred Inflow at end of the period (VI. + IX.)	(302,688)	(231,063)

Net OPEB Liability		
I. Net OPEB Liability at beginning of period	22,170,592	24,681,715
II. Service Cost	928,906	990,425
III. Interest on Total OPEB Liability, Service Cost, and Payments	2,194,113	2,544,472
IV. Projected Investment Income	(685,646)	(859,773)
V. Total Employer Contributions	(3,040,182)	(3,123,419)
VI. Net OPEB Expense - Before Recognition of Deferred (Inflow)/Outflow (II. + III. + IV. + V.)	(602,809)	(448,295)
VII. Deferred Outflow created during the period	3,488,245	0
VIII. Deferred Inflow created during the period	(374,313)	0
IX. Net OPEB Liability at end of period (I. + VI. + VII. + VIII.)	24,681,715	24,233,420

Net OPEB Expense		
I. Service Cost	928,906	990,425
II. Interest on Total OPEB Liability, Service Cost, and Payments	2,194,113	2,544,472
III. Projected Investment Income	(685,646)	(859,773)
IV. Recognition of Deferred (Inflow)/Outflow	495,569	495,569
V. Financial Statement Expense (I. + II. + III. + IV.)	2,932,942	3,170,693
VI. Benefit Payments	(1,540,182)	(1,623,419)
VII. Contributions to Trust	(1,500,000)	(1,500,000)
VIII. Total Employer Payments (VI. + VII.)	(3,040,182)	(3,123,419)
IX. Total Employer Payments (V. + VIII.)	(107,240)	47,274

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

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION (As of the June 30, 2018 Measurement Date)

Schedule of Changes in the Town's Net OPEB Liability and Related Ratios		
Valuation Date	July 1, 2017	June 30, 2016
For the Reporting Period & Fiscal Year ending on:	June 30, 2018	June 30, 2017
Total OPEB Liability	36,157,159	31,172,639
I. Service Cost	928,906	965,170
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	2,194,113	2,087,749
III. Changes in Benefit terms	0	0
IV. Difference between Expected & Actual Plan Experience	(86,562)	0
V. Changes of assumptions	3,488,245	0
VI. Benefit Payments Excluding Implicit Cost	(1,354,086)	N/A
VII. Implicit Cost Amount	(186,096)	N/A
VIII. Total Benefit payments including Implicit Cost [VI.+VII.]	(1,540,182)	(1,455,576)
IX. Net Change in OPEB liability [I.+II.+III.+IV.+V.+VIII.]	4,984,520	1,597,343
X. Total OPEB liability - beginning of period	31,172,639	29,575,296
XI. Total OPEB liability - end of period [IX.+X.]	36,157,159	31,172,639
Plan Fiduciary Net Position	11,475,444	9,002,047
XII. Earning from Plan Investments	973,397	1,013,590
XIII. Employer Contribution to trust	3,040,182	2,955,576
XIV. Benefit payments from trust, including refunds of member contributions	(1,540,182)	(1,455,576)
XV. Administrative expense	0	0
XVI. Other	0	0
XVII. Net change in plan fiduciary net position [XII.+XIII.+XIV.+XV.+XVI.]	2,473,397	2,513,590
XVIII. Plan fiduciary net position - beginning of period	9,002,047	6,488,457
XIX. Plan fiduciary net position - end of period [XVII.+XVIII.]	11,475,444	9,002,047
XX. Net OPEB Liability [XI.-XIX.]	24,681,715	22,170,592
XXI. Plan fiduciary net position as % of total OPEB liability [XIX. / XI.]	31.74%	28.88%
XXII. Covered employee payroll	34,177,472	35,188,394
XXIII. Plan NOL as % of covered employee payroll [XX. / XXII.]	72.22%	63.01%
Single Discount Rate to calculate Plan Liabilities	7.00%	7.00%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2018 Measurement Date)

Actuarially Determined Contribution - Deficiency / (Excess)		
	For the Fiscal Year Ending:	
	<u>June 30, 2018</u>	<u>June 30, 2017</u>
I. Service Cost	928,906	965,170
II. 30 year level dollar amortization of NOL	<u>1,669,765</u>	<u>1,743,412</u>
III. Actuarial Determined Contribution [I. + II.]	2,598,671	2,708,582
IV. Contributions in relation to the actuarially determined contribution	<u>(3,040,182)</u>	<u>(2,955,576)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>(441,511)</u>	<u>(246,994)</u>
Covered employee payroll	34,177,472	35,188,394
Contributions as a % of covered employee payroll	8.90%	8.40%
Discount Rate	7.00%	7.00%
Money Weighted Rate of Return	9.62%	13.80%

EXHIBIT B

REQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2018 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of July 1, 2017.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, June 30, 2018.

Actuarial Assumptions:

Investment Rate of Return:	7.04%, net of OPEB plan investment expense, including inflation.
Municipal Bond Rate	3.45% as of June 30, 2018 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
Single Equivalent Discount Rate:	7.00%, net of OPEB plan investment expense, including inflation.
Inflation:	2.75% as of June 30, 2018 and for future periods
Salary Increases:	3.00% annually as of June 30, 2018 and for future periods
Cost of Living Adjustment:	Not Applicable
Pre-Retirement Mortality:	RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Post-Retirement Mortality:	RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Disabled Mortality:	RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females

EXHIBIT BREQUIRED SUPPLEMENTARY INFORMATION

(As of the June 30, 2018 Measurement Date)

Notes to Required Supplementary Information (Continued):Plan Membership

At July 1, 2017, OPEB plan membership consisted of the following

Inactive employees or beneficiaries currently receiving benefits:	366
Active Employees:	<u>599</u>
Total:	<u>965</u>

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, 2016 to June 30, 2018

- Teacher retirement rates were updated

Contributions:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town contributed \$1,500,000 beyond the pay-as-you-go cost for the period ending on the June 30, 2018 Measurement Date. For the year ending on the June 30, 2018 Measurement Date total Town premiums plus implicit costs for the retiree medical program were \$1,540,182. \$186,096 of the \$1,540,182 was implicit cost.

APPENDIX I – LIABILITIES & CASH FLOWS

CURRENT FUNDING POLICY (OPEN GROUP)

Total Medical, Dental & Life Insurance - Funding - 7.00% discount rate

For the Fiscal Year	Period Ending on the Measurement Date of:	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 7.04% return	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Excess Employer Payments (beyond claims)	VIII. Total Employer Payments [VI. + VII.]
2018	June 30, 2018	36,157,159	11,475,444	24,681,715	31.74%	928,906	1,540,182	1,500,000	3,040,182
2019	June 30, 2019	38,068,637	13,835,217	24,233,420	36.34%	990,425	1,623,419	1,500,000	3,123,419
2020	June 30, 2020	39,368,814	16,361,118	23,007,696	41.56%	1,053,225	1,780,170	1,500,000	3,280,170
2021	June 30, 2021	41,237,675	19,064,843	22,172,832	46.23%	1,110,280	1,907,393	1,500,000	3,407,393
2022	June 30, 2022	43,166,169	21,958,910	21,207,259	50.87%	1,171,968	2,048,348	1,500,000	3,548,348
2023	June 30, 2023	45,167,611	25,056,719	20,110,892	55.47%	1,237,712	2,175,901	1,500,000	3,675,901
2024	June 30, 2024	47,277,624	28,372,614	18,905,010	60.01%	1,299,056	2,263,150	1,500,000	3,763,150
2025	June 30, 2025	49,487,310	31,921,948	17,565,362	64.51%	1,367,261	2,386,729	1,500,000	3,886,729
2026	June 30, 2026	51,778,660	35,721,155	16,057,505	68.99%	1,438,792	2,530,250	1,500,000	4,030,250
2027	June 30, 2027	54,146,771	39,787,826	14,358,945	73.48%	1,511,467	2,670,144	1,500,000	4,170,144
2028	June 30, 2028	56,604,949	44,140,791	12,464,158	77.98%	1,583,393	2,829,917	1,500,000	4,329,917
2029	June 30, 2029	59,041,539	48,800,205	10,241,334	82.65%	1,649,269	3,032,212	1,500,000	4,532,212
2030	June 30, 2030	61,602,312	53,787,641	7,814,671	87.31%	1,731,036	3,192,140	1,500,000	4,692,140
2031	June 30, 2031	64,257,659	59,126,193	5,131,466	92.01%	1,813,235	3,312,114	1,500,000	4,812,114
2032	June 30, 2032	67,014,332	64,840,579	2,173,753	96.76%	1,899,442	3,489,078	1,500,000	4,989,078
2033	June 30, 2033	69,780,268	70,957,258	(1,176,990)	101.69%	1,985,675	3,654,430	1,500,000	5,154,430
2034	June 30, 2034	72,714,620	74,226,153	(1,511,533)	102.08%	2,084,189	3,829,825	(1,668,755)	2,161,070
2035	June 30, 2035	75,646,034	77,645,637	(1,999,603)	102.64%	2,182,369	4,021,180	(1,745,636)	2,275,544
2036	June 30, 2036	78,846,060	81,209,453	(2,363,393)	103.00%	2,286,489	4,226,634	(1,838,811)	2,387,823
2037	June 30, 2037	82,202,281	84,919,322	(2,717,041)	103.31%	2,403,647	4,373,735	(1,940,145)	2,433,590
2038	June 30, 2038	85,851,625	88,859,387	(3,007,762)	103.50%	2,521,458	4,531,225	(1,970,088)	2,561,137
2039	June 30, 2039	89,577,047	93,035,780	(3,458,733)	103.86%	2,646,668	4,705,702	(2,009,767)	2,695,935
2040	June 30, 2040	93,531,132	97,455,220	(3,924,088)	104.20%	2,778,305	4,920,412	(2,059,034)	2,861,378
2041	June 30, 2041	97,664,023	102,099,841	(4,435,818)	104.54%	2,918,540	5,115,169	(2,142,107)	2,973,062
2042	June 30, 2042	102,068,420	107,015,034	(4,946,614)	104.85%	3,068,821	5,317,176	(2,196,629)	3,120,547
2043	June 30, 2043	106,754,429	112,222,741	(5,468,312)	105.12%	3,230,768	5,595,824	(2,248,355)	3,347,469
2044	June 30, 2044	111,749,676	117,676,332	(5,926,656)	105.30%	3,402,275	5,800,008	(2,365,056)	3,434,952
2045	June 30, 2045	117,036,917	123,480,048	(6,443,131)	105.51%	3,583,558	6,035,455	(2,397,733)	3,637,722
2046	June 30, 2046	122,549,761	129,636,307	(7,086,546)	105.78%	3,775,965	6,313,708	(2,451,897)	3,861,811
2047	June 30, 2047	128,438,280	136,137,151	(7,698,871)	105.99%	3,975,816	6,531,217	(2,537,743)	3,993,474
2048	June 30, 2048	134,683,403	143,077,385	(8,393,982)	106.23%	4,191,011	6,734,955	(2,555,401)	4,179,554
2049	June 30, 2049	141,380,127	150,518,065	(9,137,938)	106.46%	4,413,275	7,031,300	(2,543,944)	4,487,356

APPENDIX I – LIABILITIES & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES

Projection of Contributions using a July 1, 2017 Valuation Date

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2018	34,177,472	0	34,177,472	0	1,540,182	0	1,540,182
June 30, 2019	32,319,055	2,883,741	35,202,796	0	1,623,419	0	1,623,419
June 30, 2020	31,215,604	5,043,276	36,258,880	0	1,780,170	0	1,780,170
June 30, 2021	30,218,587	7,128,059	37,346,646	0	1,907,393	0	1,907,393
June 30, 2022	29,383,130	9,083,915	38,467,045	0	2,048,348	0	2,048,348
June 30, 2023	28,835,467	10,785,589	39,621,056	0	2,175,901	0	2,175,901
June 30, 2024	28,216,017	12,593,671	40,809,688	0	2,263,150	0	2,263,150
June 30, 2025	27,586,555	14,447,424	42,033,979	0	2,386,729	0	2,386,729
June 30, 2026	27,028,936	16,266,062	43,294,998	0	2,530,250	0	2,530,250
June 30, 2027	26,513,018	18,080,830	44,593,848	0	2,670,144	0	2,670,144
June 30, 2028	25,863,773	20,067,890	45,931,663	0	2,829,917	0	2,829,917
June 30, 2029	24,918,600	22,391,013	47,309,613	0	3,009,554	22,658	3,032,212
June 30, 2030	24,083,401	24,645,500	48,728,901	0	3,133,901	58,239	3,192,140
June 30, 2031	23,329,326	26,861,442	50,190,768	0	3,203,234	108,880	3,312,114
June 30, 2032	22,653,212	29,043,279	51,696,491	0	3,313,345	175,733	3,489,078
June 30, 2033	21,790,215	31,457,171	53,247,386	0	3,397,722	256,708	3,654,430
June 30, 2034	21,004,945	33,839,863	54,844,808	0	3,506,026	323,799	3,829,825
June 30, 2035	20,060,392	36,429,760	56,490,152	0	3,621,378	399,802	4,021,180
June 30, 2036	19,039,384	39,145,473	58,184,857	0	3,741,387	485,247	4,226,634
June 30, 2037	18,134,357	41,796,046	59,930,403	0	3,813,462	560,273	4,373,735
June 30, 2038	17,262,230	44,466,085	61,728,315	0	3,888,907	642,318	4,531,225
June 30, 2039	16,478,869	47,101,295	63,580,164	0	3,950,377	755,325	4,705,702
June 30, 2040	15,719,610	49,767,959	65,487,569	0	4,013,614	906,798	4,920,412
June 30, 2041	14,921,535	52,530,661	67,452,196	0	4,018,054	1,097,115	5,115,169
June 30, 2042	14,064,832	55,410,930	69,475,762	0	3,988,829	1,328,347	5,317,176
June 30, 2043	13,292,156	58,267,879	71,560,035	0	4,000,648	1,595,176	5,595,824
June 30, 2044	12,497,860	61,208,976	73,706,836	0	3,977,811	1,822,197	5,800,008
June 30, 2045	11,633,179	64,284,862	75,918,041	0	3,964,750	2,070,705	6,035,455
June 30, 2046	10,788,288	67,407,294	78,195,582	0	3,968,923	2,344,785	6,313,708
June 30, 2047	9,868,084	70,673,365	80,541,449	0	3,927,376	2,603,841	6,531,217
June 30, 2048	9,008,523	73,949,169	82,957,692	0	3,853,680	2,881,275	6,734,955
June 30, 2049	8,118,657	77,327,766	85,446,423	0	3,834,573	3,196,727	7,031,300
June 30, 2050	7,371,856	80,637,960	88,009,816	0	3,788,634	3,545,932	7,334,566
June 30, 2051	6,617,990	84,032,120	90,650,110	0	3,708,839	3,928,058	7,636,897
June 30, 2052	5,869,972	87,499,641	93,369,613	0	3,624,552	4,348,304	7,972,856
June 30, 2053	5,201,334	90,969,367	96,170,701	0	3,581,400	4,805,077	8,386,477
June 30, 2054	4,676,216	94,379,606	99,055,822	0	3,489,092	5,259,514	8,748,606
June 30, 2055	4,107,446	97,920,051	102,027,497	0	3,418,707	5,742,429	9,161,136
June 30, 2056	3,558,068	101,530,254	105,088,322	0	3,366,970	6,259,048	9,626,018
June 30, 2057	2,950,947	105,290,025	108,240,972	0	3,269,554	6,796,246	10,065,800

APPENDIX I – LIABILITIES & CASH FLOWS

CONTRIBUTION PROJECTION DISCLOSURES (CONTINUED)

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

For the Period Ending on the Measurement Date	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
June 30, 2058	2,424,401	109,063,800	111,488,201	0	3,168,906	7,361,710	10,530,616
June 30, 2059	1,878,403	112,954,444	114,832,847	0	3,088,650	7,965,815	11,054,465
June 30, 2060	1,504,411	116,773,421	118,277,832	0	3,000,977	8,609,036	11,610,013
June 30, 2061	1,133,985	120,692,182	121,826,167	0	2,878,997	9,290,779	12,169,776
June 30, 2062	769,076	124,711,876	125,480,952	0	2,795,900	10,013,955	12,809,855
June 30, 2063	496,966	128,748,415	129,245,381	0	2,699,893	10,781,554	13,481,447
June 30, 2064	345,382	132,777,360	133,122,742	0	2,598,342	11,573,853	14,172,195
June 30, 2065	197,991	136,918,433	137,116,424	0	2,500,448	12,407,665	14,908,113
June 30, 2066	56,871	141,173,046	141,229,917	0	2,402,320	13,288,515	15,690,835
June 30, 2067	42,200	145,424,615	145,466,815	0	2,300,651	14,204,690	16,505,341
June 30, 2068	17,799	149,813,020	149,830,819	0	2,196,161	15,165,958	17,362,119
June 30, 2069	3,962	154,321,782	154,325,744	0	2,092,034	16,175,537	18,267,571
June 30, 2070	0	158,955,516	158,955,516	0	1,986,967	17,233,345	19,220,312
June 30, 2071	0	163,724,181	163,724,181	0	1,881,648	18,340,305	20,221,953
June 30, 2072	0	168,635,906	168,635,906	0	1,776,341	19,500,990	21,277,331
June 30, 2073	0	173,694,983	173,694,983	0	1,681,099	20,716,233	22,397,332
June 30, 2074	0	178,905,832	178,905,832	0	1,596,707	21,989,060	23,585,767
June 30, 2075	0	184,273,007	184,273,007	0	1,511,608	23,320,727	24,832,335
June 30, 2076	0	189,801,197	189,801,197	0	1,425,402	24,717,243	26,142,645
June 30, 2077	0	195,495,233	195,495,233	0	1,338,031	26,179,294	27,517,325
June 30, 2078	0	201,360,090	201,360,090	0	1,250,318	27,710,748	28,961,066
June 30, 2079	0	207,400,893	207,400,893	0	1,162,411	29,316,594	30,479,005
June 30, 2080	0	213,622,920	213,622,920	0	1,075,551	31,001,723	32,077,274
June 30, 2081	0	220,031,608	220,031,608	0	989,529	32,769,184	33,758,713
June 30, 2082	0	226,632,556	226,632,556	0	905,553	34,624,320	35,529,873
June 30, 2083	0	233,431,533	233,431,533	0	823,890	36,572,380	37,396,270
June 30, 2084	0	240,434,479	240,434,479	0	744,328	38,618,128	39,362,456
June 30, 2085	0	247,647,513	247,647,513	0	667,112	40,765,004	41,432,116
June 30, 2086	0	255,076,938	255,076,938	0	593,298	43,020,157	43,613,455
June 30, 2087	0	262,729,246	262,729,246	0	522,755	45,389,128	45,911,883
June 30, 2088	0	270,611,123	270,611,123	0	456,789	47,876,940	48,333,729
June 30, 2089	0	278,729,457	278,729,457	0	394,885	50,491,680	50,886,565
June 30, 2090	0	287,091,341	287,091,341	0	338,036	53,240,041	53,578,077
June 30, 2091	0	295,704,081	295,704,081	0	285,934	56,128,196	56,414,130
June 30, 2092	0	304,575,203	304,575,203	0	239,299	59,164,804	59,404,103
June 30, 2093	0	313,712,459	313,712,459	0	197,506	62,357,568	62,555,074
June 30, 2094	0	323,123,833	323,123,833	0	161,034	65,714,685	65,875,719
June 30, 2095	0	332,817,548	332,817,548	0	129,564	69,243,222	69,372,786
June 30, 2096	0	342,802,074	342,802,074	0	102,701	72,954,129	73,056,830

APPENDIX I – LIABILITIES & CASH FLOWS

FIDUCIARY NET POSITION PROJECTION DISCLOSURES

Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2017 Valuation Date

For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Portion of Employer Contributions for Current Plan Members	III. Total Benefit Payments	IV. Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Investment Earnings	VIII. Ending Fiduciary Net Position for Current Plan Members
June 30, 2018	9,002,047	1,540,182	1,540,182	0	1,500,000	1,500,000	973,397	11,475,444
June 30, 2019	11,475,444	1,623,419	1,623,419	0	1,500,000	1,377,123	789,342	13,641,909
June 30, 2020	13,641,909	1,780,170	1,780,170	0	1,500,000	1,291,364	1,005,073	15,938,346
June 30, 2021	15,938,346	1,907,393	1,907,393	0	1,500,000	1,213,707	1,164,055	18,316,108
June 30, 2022	18,316,108	2,048,348	2,048,348	0	1,500,000	1,145,778	1,329,099	20,790,985
June 30, 2023	20,790,985	2,175,901	2,175,901	0	1,500,000	1,091,672	1,501,459	23,384,116
June 30, 2024	23,384,116	2,263,150	2,263,150	0	1,500,000	1,037,107	1,682,127	26,103,350
June 30, 2025	26,103,350	2,386,729	2,386,729	0	1,500,000	984,438	1,871,739	28,959,527
June 30, 2026	28,959,527	2,530,250	2,530,250	0	1,500,000	936,445	2,071,153	31,967,125
June 30, 2027	31,967,125	2,670,144	2,670,144	0	1,500,000	891,816	2,281,344	35,140,285
June 30, 2028	35,140,285	2,829,917	2,829,917	0	1,500,000	844,639	2,503,102	38,488,026
June 30, 2029	38,488,026	3,009,554	3,032,212	0	1,500,000	790,070	2,736,895	41,992,333
June 30, 2030	41,992,333	3,133,901	3,192,140	0	1,500,000	741,349	2,981,912	45,657,355
June 30, 2031	45,657,355	3,203,234	3,312,114	0	1,500,000	697,220	3,238,403	49,484,098
June 30, 2032	49,484,098	3,313,345	3,489,078	0	1,500,000	657,294	3,506,424	53,472,083
June 30, 2033	53,472,083	3,397,722	3,654,430	0	1,500,000	613,839	3,785,674	57,614,888
June 30, 2034	57,614,888	3,506,026	3,829,825	0	0	0	4,056,088	61,347,177
June 30, 2035	61,347,177	3,621,378	4,021,180	0	0	0	4,318,841	65,266,216
June 30, 2036	65,266,216	3,741,387	4,226,634	0	0	0	4,594,742	69,375,711
June 30, 2037	69,375,711	3,813,462	4,373,735	0	0	0	4,884,050	73,699,488
June 30, 2038	73,699,488	3,888,907	4,531,225	0	0	0	5,188,444	78,245,614
June 30, 2039	78,245,614	3,950,377	4,705,702	0	0	0	5,508,491	82,998,780
June 30, 2040	82,998,780	4,013,614	4,920,412	0	0	0	5,843,114	87,935,096
June 30, 2041	87,935,096	4,018,054	5,115,169	0	0	0	6,190,631	93,028,612
June 30, 2042	93,028,612	3,988,829	5,317,176	0	0	0	6,549,214	98,249,479
June 30, 2043	98,249,479	4,000,648	5,595,824	0	0	0	6,916,763	103,571,066
June 30, 2044	103,571,066	3,977,811	5,800,008	0	0	0	7,291,403	109,040,272
June 30, 2045	109,040,272	3,964,750	6,035,455	0	0	0	7,676,435	114,646,002
June 30, 2046	114,646,002	3,968,923	6,313,708	0	0	0	8,071,079	120,372,296
June 30, 2047	120,372,296	3,927,376	6,531,217	0	0	0	8,474,210	126,242,665
June 30, 2048	126,242,665	3,853,680	6,734,955	0	0	0	8,887,484	132,248,874
June 30, 2049	132,248,874	3,834,573	7,031,300	0	0	0	9,310,321	138,362,468
June 30, 2050	138,362,468	3,788,634	7,334,566	0	0	0	9,740,718	144,557,254
June 30, 2051	144,557,254	3,708,839	7,636,897	0	0	0	10,176,831	150,806,027
June 30, 2052	150,806,027	3,624,552	7,972,856	0	0	0	10,616,744	157,074,467
June 30, 2053	157,074,467	3,581,400	8,386,477	0	0	0	11,058,042	163,327,432
June 30, 2054	163,327,432	3,489,092	8,748,606	0	0	0	11,498,251	169,566,169
June 30, 2055	169,566,169	3,418,707	9,161,136	0	0	0	11,937,458	175,761,198
June 30, 2056	175,761,198	3,366,970	9,626,018	0	0	0	12,373,588	181,875,738
June 30, 2057	181,875,738	3,269,554	10,065,800	0	0	0	12,804,052	187,883,544

APPENDIX I – LIABILITIES & CASH FLOWS

FIDUCIARY POSITION PROJECTION DISCLOSURES (CONTINUED)

Projection of OPEB Plan's Fiduciary Net Position using a July 1, 2017 Valuation Date (Continued)									
For the Period Ending on the Measurement Date	I. Beginning Fiduciary Net Position for Current Plan Members	II. Portion of Employer Contributions for Current Plan Members	III. Total Benefit Payments	IV. Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Investment Earnings	VIII. Ending Fiduciary Net Position for Current Plan Members	
June 30, 2058	187,883,544	3,168,906	10,530,616	0	0	0	13,227,001	185,002,270	
June 30, 2059	185,002,270	3,088,650	11,054,465	0	0	0	13,024,160	182,126,665	
June 30, 2060	182,126,665	3,000,977	11,610,013	0	0	0	12,821,717	179,288,772	
June 30, 2061	179,288,772	2,878,997	12,169,776	0	0	0	12,621,930	176,527,262	
June 30, 2062	176,527,262	2,795,900	12,809,855	0	0	0	12,427,519	173,807,531	
June 30, 2063	173,807,531	2,699,893	13,481,447	0	0	0	12,236,050	171,154,687	
June 30, 2064	171,154,687	2,598,342	14,172,195	0	0	0	12,049,290	168,587,607	
June 30, 2065	168,587,607	2,500,448	14,908,113	0	0	0	11,868,568	166,104,296	
June 30, 2066	166,104,296	2,402,320	15,690,835	0	0	0	11,693,742	163,706,685	
June 30, 2067	163,706,685	2,300,651	16,505,341	0	0	0	11,524,951	161,409,378	
June 30, 2068	161,409,378	2,196,161	17,362,119	0	0	0	11,363,220	159,214,567	
June 30, 2069	159,214,567	2,092,034	18,267,571	0	0	0	11,208,705	157,122,820	
June 30, 2070	157,122,820	1,986,967	19,220,312	0	0	0	11,061,447	155,135,853	
June 30, 2071	155,135,853	1,881,648	20,221,953	0	0	0	10,921,564	153,254,205	
June 30, 2072	153,254,205	1,776,341	21,277,331	0	0	0	10,789,096	151,477,864	
June 30, 2073	151,477,864	1,681,099	22,397,332	0	0	0	10,664,042	149,796,765	
June 30, 2074	149,796,765	1,596,707	23,585,767	0	0	0	10,545,692	148,200,058	
June 30, 2075	148,200,058	1,511,608	24,832,335	0	0	0	10,433,284	146,688,450	
June 30, 2076	146,688,450	1,425,402	26,142,645	0	0	0	10,326,867	145,263,048	
June 30, 2077	145,263,048	1,338,031	27,517,325	0	0	0	10,226,519	143,925,017	
June 30, 2078	143,925,017	1,250,318	28,961,066	0	0	0	10,132,321	142,674,699	
June 30, 2079	142,674,699	1,162,411	30,479,005	0	0	0	10,044,299	141,512,288	
June 30, 2080	141,512,288	1,075,551	32,077,274	0	0	0	9,962,465	140,436,737	
June 30, 2081	140,436,737	989,529	33,758,713	0	0	0	9,886,746	139,447,208	
June 30, 2082	139,447,208	905,553	35,529,873	0	0	0	9,817,083	138,541,655	
June 30, 2083	138,541,655	823,890	37,396,270	0	0	0	9,753,333	137,717,765	
June 30, 2084	137,717,765	744,328	39,362,456	0	0	0	9,695,331	136,973,437	
June 30, 2085	136,973,437	667,112	41,432,116	0	0	0	9,642,930	136,306,325	
June 30, 2086	136,306,325	593,298	43,613,455	0	0	0	9,595,965	135,713,027	
June 30, 2087	135,713,027	522,755	45,911,883	0	0	0	9,554,197	135,190,272	
June 30, 2088	135,190,272	456,789	48,333,729	0	0	0	9,517,395	134,733,483	
June 30, 2089	134,733,483	394,885	50,886,565	0	0	0	9,485,237	134,338,598	
June 30, 2090	134,338,598	338,036	53,578,077	0	0	0	9,457,437	134,000,562	
June 30, 2091	134,000,562	285,934	56,414,130	0	0	0	9,433,640	133,714,628	
June 30, 2092	133,714,628	239,299	59,404,103	0	0	0	9,413,510	133,475,329	
June 30, 2093	133,475,329	197,506	62,555,074	0	0	0	9,396,663	133,277,823	
June 30, 2094	133,277,823	161,034	65,875,719	0	0	0	9,382,759	133,116,789	
June 30, 2095	133,116,789	129,564	69,372,786	0	0	0	9,371,422	132,987,225	
June 30, 2096	132,987,225	102,701	73,056,830	0	0	0	9,362,301	132,884,524	

APPENDIX I – LIABILITIES & CASH FLOWS

BENEFIT PAYMENT PROJECTION DISCLOSURES

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

For the Period Ending on the Measurement Date	Beginning Fiduciary Net Position for Current Plan Members	Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Equivalent Discount Rate
June 30, 2018	9,002,047	1,540,182	1,540,182	0	1,540,182	0	1,540,182
June 30, 2019	11,475,444	1,623,419	1,623,419	0	1,516,647	0	1,516,647
June 30, 2020	13,641,909	1,780,170	1,780,170	0	1,553,708	0	1,553,708
June 30, 2021	15,938,346	1,907,393	1,907,393	0	1,555,256	0	1,555,256
June 30, 2022	18,316,108	2,048,348	2,048,348	0	1,560,340	0	1,560,340
June 30, 2023	20,790,985	2,175,901	2,175,901	0	1,548,491	0	1,548,491
June 30, 2024	23,384,116	2,263,150	2,263,150	0	1,504,654	0	1,504,654
June 30, 2025	26,103,350	2,386,729	2,386,729	0	1,482,451	0	1,482,451
June 30, 2026	28,959,527	2,530,250	2,530,250	0	1,468,232	0	1,468,232
June 30, 2027	31,967,125	2,670,144	2,670,144	0	1,447,504	0	1,447,504
June 30, 2028	35,140,285	2,829,917	2,829,917	0	1,433,219	0	1,433,219
June 30, 2029	38,488,026	3,009,554	3,009,554	0	1,423,951	0	1,423,951
June 30, 2030	41,992,333	3,133,901	3,133,901	0	1,385,262	0	1,385,262
June 30, 2031	45,657,355	3,203,234	3,203,234	0	1,322,785	0	1,322,785
June 30, 2032	49,484,098	3,313,345	3,313,345	0	1,278,266	0	1,278,266
June 30, 2033	53,472,083	3,397,722	3,397,722	0	1,224,606	0	1,224,606
June 30, 2034	57,614,888	3,506,026	3,506,026	0	1,180,531	0	1,180,531
June 30, 2035	61,347,177	3,621,378	3,621,378	0	1,139,174	0	1,139,174
June 30, 2036	65,266,216	3,741,387	3,741,387	0	1,099,519	0	1,099,519
June 30, 2037	69,375,711	3,813,462	3,813,462	0	1,046,992	0	1,046,992
June 30, 2038	73,699,488	3,888,907	3,888,907	0	997,483	0	997,483
June 30, 2039	78,245,614	3,950,377	3,950,377	0	946,609	0	946,609
June 30, 2040	82,998,780	4,013,614	4,013,614	0	898,507	0	898,507
June 30, 2041	87,935,096	4,018,054	4,018,054	0	840,341	0	840,341
June 30, 2042	93,028,612	3,988,829	3,988,829	0	779,362	0	779,362
June 30, 2043	98,249,479	4,000,648	4,000,648	0	730,261	0	730,261
June 30, 2044	103,571,066	3,977,811	3,977,811	0	678,337	0	678,337
June 30, 2045	109,040,272	3,964,750	3,964,750	0	631,642	0	631,642
June 30, 2046	114,646,002	3,968,923	3,968,923	0	590,720	0	590,720
June 30, 2047	120,372,296	3,927,376	3,927,376	0	546,092	0	546,092
June 30, 2048	126,242,665	3,853,680	3,853,680	0	500,602	0	500,602
June 30, 2049	132,248,874	3,834,573	3,834,573	0	465,359	0	465,359
June 30, 2050	138,362,468	3,788,634	3,788,634	0	429,544	0	429,544
June 30, 2051	144,557,254	3,708,839	3,708,839	0	392,841	0	392,841
June 30, 2052	150,806,027	3,624,552	3,624,552	0	358,663	0	358,663
June 30, 2053	157,074,467	3,581,400	3,581,400	0	331,085	0	331,085
June 30, 2054	163,327,432	3,489,092	3,489,092	0	301,337	0	301,337
June 30, 2055	169,566,169	3,418,707	3,418,707	0	275,839	0	275,839
June 30, 2056	175,761,198	3,366,970	3,366,970	0	253,798	0	253,798
June 30, 2057	181,875,738	3,269,554	3,269,554	0	230,245	0	230,245

APPENDIX I – LIABILITIES & CASH FLOWS

BENEFIT PAYMENT PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a July 1, 2017 Valuation Date (Continued)							
For the Period	Beginning						Present Value of
Ending on the	Fiduciary Net				Unfunded	Present Value of	Benefit Payments
Measurement	Position for	Funded Portion	Portion of	Portion of	Funded Benefit	Unfunded Benefit	using Single
Date	Current Plan	Benefit	of Benefit	Benefit	Payments	Payments	Equivalent Discount
	Members	Payments	Payments	Payments			Rate
June 30, 2058	187,883,544	3,168,906	3,168,906	0	208,480	0	208,480
June 30, 2059	185,002,270	3,088,650	3,088,650	0	189,836	0	189,836
June 30, 2060	182,126,665	3,000,977	3,000,977	0	172,316	0	172,316
June 30, 2061	179,288,772	2,878,997	2,878,997	0	154,440	0	154,440
June 30, 2062	176,527,262	2,795,900	2,795,900	0	140,118	0	140,118
June 30, 2063	173,807,531	2,699,893	2,699,893	0	126,407	0	126,407
June 30, 2064	171,154,687	2,598,342	2,598,342	0	113,652	0	113,652
June 30, 2065	168,587,607	2,500,448	2,500,448	0	102,177	0	102,177
June 30, 2066	166,104,296	2,402,320	2,402,320	0	91,710	0	91,710
June 30, 2067	163,706,685	2,300,651	2,300,651	0	82,053	0	82,053
June 30, 2068	161,409,378	2,196,161	2,196,161	0	73,174	0	73,174
June 30, 2069	159,214,567	2,092,034	2,092,034	0	65,120	0	65,120
June 30, 2070	157,122,820	1,986,967	1,986,967	0	57,782	0	57,782
June 30, 2071	155,135,853	1,881,648	1,881,648	0	51,120	0	51,120
June 30, 2072	153,254,205	1,776,341	1,776,341	0	45,086	0	45,086
June 30, 2073	151,477,864	1,681,099	1,681,099	0	39,862	0	39,862
June 30, 2074	149,796,765	1,596,707	1,596,707	0	35,371	0	35,371
June 30, 2075	148,200,058	1,511,608	1,511,608	0	31,283	0	31,283
June 30, 2076	146,688,450	1,425,402	1,425,402	0	27,559	0	27,559
June 30, 2077	145,263,048	1,338,031	1,338,031	0	24,168	0	24,168
June 30, 2078	143,925,017	1,250,318	1,250,318	0	21,099	0	21,099
June 30, 2079	142,674,699	1,162,411	1,162,411	0	18,325	0	18,325
June 30, 2080	141,512,288	1,075,551	1,075,551	0	15,841	0	15,841
June 30, 2081	140,436,737	989,529	989,529	0	13,615	0	13,615
June 30, 2082	139,447,208	905,553	905,553	0	11,640	0	11,640
June 30, 2083	138,541,655	823,890	823,890	0	9,894	0	9,894
June 30, 2084	137,717,765	744,328	744,328	0	8,351	0	8,351
June 30, 2085	136,973,437	667,112	667,112	0	6,992	0	6,992
June 30, 2086	136,306,325	593,298	593,298	0	5,809	0	5,809
June 30, 2087	135,713,027	522,755	522,755	0	4,782	0	4,782
June 30, 2088	135,190,272	456,789	456,789	0	3,904	0	3,904
June 30, 2089	134,733,483	394,885	394,885	0	3,153	0	3,153
June 30, 2090	134,338,598	338,036	338,036	0	2,521	0	2,521
June 30, 2091	134,000,562	285,934	285,934	0	1,993	0	1,993
June 30, 2092	133,714,628	239,299	239,299	0	1,558	0	1,558
June 30, 2093	133,475,329	197,506	197,506	0	1,201	0	1,201
June 30, 2094	133,277,823	161,034	161,034	0	915	0	915
June 30, 2095	133,116,789	129,564	129,564	0	688	0	688
June 30, 2096	132,987,225	102,701	102,701	0	509	0	509

APPENDIX II – PLAN PROVISIONS

<u>Effective Date</u>	<p>GASB 45 was adopted July 1, 2007</p> <p>GASB 74 was adopted for the fiscal year ending June 30, 2017</p> <p>GASB 75 was adopted for the fiscal year ending June 30, 2018</p>
<u>Plan Year</u>	July 1 through June 30.
<u>Eligibility</u>	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Blue Cross, Harvard Pilgrim, Tufts Health Plan & Fallon Insurance and \$3,000 in Group Term Life Insurance.
<u>Excise Tax</u>	Under the Patient Protection and Affordable Care Act ("PPACA"), a 40% tax will be imposed on the cost of medical benefits in excess of a specified threshold.
<u>Participant Contributions</u>	
a. Medical:	Employees will pay 40% of premiums in retirement (50% for Harvard Pilgrim PPO).
b. Dental:	N/A
c. Life:	Employees will pay 50% of premiums in retirement.
<u>Medicare Part B</u>	<p>The Town does not reimburse Medicare Part B.</p> <p>The Town does not reimburse Medicare Part B Penalties.</p>
<u>Surviving Spouse Coverage</u>	Surviving spouses pay 100% of premiums.

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

IMPLICIT SUBSIDY

A retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This is known as an “implicit subsidy”. GASB 74 and 75 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. Actuarial Standard of Practice No. 6 (“ASOP 6”) requires us to recognize this implicit subsidy while the plan sponsor may only pay the premiums billed by an insurance provider.

PLAN DEMOGRAPHICS

ACTIVE EMPLOYEES

Valuation Date	<u>July 1, 2017</u>	<u>June 30, 2016</u>
A. Average Age at Hire	35.46	35.47
B. Average Service	<u>9.63</u>	<u>11.06</u>
C. Average Current Age	45.09	46.53

RETIRED EMPLOYEES & SPOUSES

Valuation Date	<u>July 1, 2017</u>	<u>June 30, 2016</u>
A. Under Age 65	66	48
B. Age 65 & Over	<u>300</u>	<u>276</u>
C. Total	366	324

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

CLAIM COST DEVELOPMENT

	Number of Contracts			
	Single	Two-Person	Family	Total
Blue Cross Benchmark	18		11	29
Harvard Pilgrim Benchmark	69		79	148
Tufts Navigator Benchmark	19		11	30
Fallon Select Care Benchmark	32		54	86
Fallon Direct Care Benchmark	23		8	31
Blue Cross High Deductible	2		1	3
Harvard Pilgrim High Deductible	14		15	29
Tufts Navigator High Deductible	4		2	6
Fallon Select High Deductible	6		6	12
Fallon Direct High Deductible	1			1
Harvard Pilgrim PPO	2			2
Tufts Medicare Preferred	18			18
Tufts Medicare Plus	40			40
Managed Blue for Seniors	2			2
HPHC Medicare Enhance	117			117
BCBC Medex	117			117
Total	484	0	187	671

	Per Contract Costs (monthly) - FY 2019		
	Single	Two-Person	Family
Blue Cross Benchmark	980.00		2,628.00
Harvard Pilgrim Benchmark	885.00		2,305.00
Tufts Navigator Benchmark	945.00		2,474.00
Fallon Select Care Benchmark	695.00		1,873.00
Fallon Direct Care Benchmark	647.00		1,742.00
Blue Cross High Deductible	807.00		2,166.00
Harvard Pilgrim High Deductible	698.00		1,820.00
Tufts Navigator High Deductible	745.00		1,952.00
Fallon Select High Deductible	596.00		1,608.00
Fallon Direct High Deductible	556.00		1,498.00
Harvard Pilgrim PPO	2,612.00		5,800.00
Tufts Medicare Preferred	314.00	628.00	
Tufts Medicare Plus	385.00	770.00	
Managed Blue for Seniors	351.00	702.00	
HPHC Medicare Enhance	370.00	740.00	
BCBC Medex	379.00	758.00	
Dental Plan	N/A		N/A

ANNUAL PER CAPITA CLAIMS

ACTIVE EMPLOYEES		
Age Bracket	Female	Male
24 & Under	7,998	3,347
25 to 29	7,998	3,603
30 to 34	7,998	4,340
35 to 39	7,998	5,182
40 to 44	7,998	6,096
45 to 49	8,876	7,273
50 to 54	9,748	8,784
55 to 59	10,607	10,686
60 to 64	11,997	12,814
65 to 69	13,216	14,118
70 & Over	14,606	15,587

RETIREE - NOT MEDICARE ELIGIBLE		
Age Bracket	Female	Male
44 & Under	7,998	6,096
45 to 49	8,876	7,273
50 to 54	9,748	8,784
55 to 59	10,607	10,686
60 to 64	11,997	12,814
65 to 69	13,216	14,118
70 to 74	14,606	15,587
75 to 79	15,807	16,880
80 to 84	16,606	17,739
85 to 89	17,459	18,648
90 & Over	18,349	19,599

RETIREE - MEDICARE ELIGIBLE		
Age Bracket	Female	Male
65 to 69	3,909	4,175
70 to 74	4,320	4,610
75 to 79	4,675	4,992
80 to 84	4,911	5,246
85 to 89	5,163	5,515
90 & Over	5,427	5,796

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

<u>Pre-Retirement Mortality</u>	RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
<u>Post-Retirement Mortality</u>	RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
<u>Disabled Mortality</u>	RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females
<u>Mortality Experience Study</u>	The mortality assumptions reflect PERAC's recent experience analysis published in 2014 (based on the years 2006-2011), updated to reflect data through January 1, 2015 for post-retirement mortality, and professional judgement. As such, mortality assumptions reflect observed current mortality as well as expected mortality improvements.
<u>Discount Rate</u>	7.00% per annum (previously 7.00%)
<u>Long Term Rate of Return</u>	7.04% (based on investment policy)
<u>Municipal Bond Rate</u>	3.45% as of June 30, 2018 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
<u>Actuarial Cost Method</u>	Individual Entry Age Normal
<u>Asset-Valuation Method</u>	Market Value of Assets as of the Measurement Date, June 30, 2018.

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Excise Tax

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

Employee Termination

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

Non-Public Safety Employees						
<u>Age</u>	<u>0-4 Years of Service (Males)</u>	<u>0-4 Years of Service (Females)</u>	<u>5-9 Years of Service (Males)</u>	<u>5-9 Years of Service (Females)</u>	<u>10+ Years of Service (Males)</u>	<u>10+ Years of Service (Females)</u>
20	27.00%	27.00%	12.00%	12.00%	6.00%	6.00%
30	23.00%	23.00%	10.00%	10.00%	5.50%	5.50%
40	16.00%	16.00%	8.00%	8.00%	3.50%	3.50%
50	18.00%	18.00%	6.00%	6.00%	3.00%	3.00%
60	18.00%	18.00%	5.00%	5.00%	3.50%	3.50%

Public Safety Employees		
<u>Service</u>	<u>Public Safety Male</u>	<u>Public Safety Female</u>
0	9.00%	9.00%
5	6.00%	6.00%
10	3.50%	3.50%
15	2.00%	2.00%
20	1.50%	1.50%
25	1.50%	1.50%
30	1.50%	1.50%

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Retirement Rates for Eligible Employees

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

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

Permanent Disability Rates

<u>Age</u>	<u>Standard</u>	<u>Teachers</u>	<u>Public Safety</u>
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

<u>Medical & Dental Trend Rate</u>	Initial trend of 5.00% for 2018 grading down 0.00% per year for an ultimate trend rate of 5.00%.
<u>Participation Rate</u>	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.
<u>Spouse Participation Rate</u>	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.
<u>Spouse Demographics</u>	If provided, the actual census information was used. Otherwise it was assumed that a male spouse is three years older than a female spouse and same sex spouses are assumed to be the same age.
<u>Compensation Increases</u>	3.00% per year.
<u>Inflation Rate</u>	2.75% per year.

APPENDIX III – ACTUARIAL METHODS & ASSUMPTIONS

Open Group Forecast

It was assumed for projecting plan liabilities in future years that the active population would remain unchanged and that those who terminate employment or retire will be replaced with new employees with the demographics below:

Open Group Forecast Population Demographics

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	8.0%	5.0%
30	7.0%	14.0%
40	20.0%	19.0%
50	10.0%	10.0%
60	<u>3.0%</u>	<u>4.0%</u>
Total	48.0%	52.0%

Additional Comments

The values in this report reflect a closed group and do not reflect any new entrants after the valuation date.

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

APPENDIX IV - 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 post-employment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 74 and 75 extend this practice to all other post-employment benefits.

APPENDIX IV - 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 post-employment benefits and when will they start?

Medical inflation and claims cost assumptions: When an employee starts receiving post-employment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption: How long is a retiree likely to receive benefits?

Discount rate assumption: What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the Town, the present value is divided into three pieces: the part that is attributed to past years (the "Total OPEB Liability" or "Past Service Liability"), the part that is being earned this year (the "Service Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Service Cost have been calculated, the next step is to determine an actuarially determined contribution. This is an amount that if paid annually would fully prefund the benefits for current active and retired employees. This consists of two pieces:

- ✓ Service Cost – because the benefits earned by active employees each year should be paid for each year
- ✓ Past Service Cost – a catch-up payment to fund the Accrued Liability over a period of time determined by an actuary

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the Town's financial statements as the Net OPEB Liability (NOL). If you decide to fully fund the NOL this will appear in the financial statement as a Net OPEB Asset. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.

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.

GASB - Government Accounting Standards Board. "The Governmental Accounting Standards Board (GASB) was organized in 1984 by the Financial Accounting Foundation (FAF) to establish standards of financial accounting and reporting for state and local governmental entities. Its standards guide the preparation of external financial reports of those entities."

Implicit Subsidy - The liability that arises because retirees who are not eligible for Medicare are charged the same premium as active employees even though their actual medical costs are higher on average.

GLOSSARY

(continued)

Irrevocable Contribution – The transfer of assets to a qualified trust in which assets may only be withdrawn for the purpose of providing retiree other post employment benefits.

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

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

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

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

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

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