

**Town of Hamilton Other
Postemployment Benefits Plan**

GASB 45 Actuarial Valuation

as of

July 1, 2014

For the fiscal years ending

June 30, 2015

June 30, 2016

June 30, 2017

Delivered September 2015

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September 21, 2015

Personal and Confidential

Ms. Dyan Katz
Assistant Town Accountant
Town of Hamilton
577 Bay Road, PO Box 429
Hamilton, MA 01936

Dear Ms. Katz:

We have performed an actuarial valuation of the Town of Hamilton Other Postemployment Benefits Plan for the fiscal year ending June 30, 2015. The figures presented in this report reflect the adoption, by the Town of Hamilton, of Statement No. 45 of the Governmental Accounting Standards Board ("GASB 45") effective July 1, 2008.

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, taking into account the experience of the plan and reasonable expectations and, in combination, represent our best estimate of the anticipated experience under the plan.

We refer you to Section I of this report for a detailed summary and commentary on the results of the valuation and a comparison with the prior valuation. Section II is a summary of the plan provisions, and Section III describes the actuarial cost method and assumptions. Details for cost calculations, supporting data, and disclosures are provided in Exhibits A through C.

We will be pleased to answer any questions that you may have regarding this actuarial valuation report.

Very truly yours,

A handwritten signature in black ink, appearing to read 'P. Elmore', written in a cursive style.

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

September 21, 2015

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Hamilton other postemployment benefit programs as of July 1, 2014 for the fiscal year ending June 30, 2015 in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Number 43 and 45 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 43 and 45 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

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

Town of Hamilton **Assuming Pay-as-you-go funding - 4.00% discount rate** **Comparison of Plan Liabilities to Prior Valuation**

	<u>July 1, 2014</u>	<u>July 1, 2011</u>
I. Present Value of Future Benefits		
A. Actives	4,749,293	5,264,645
B. Retirees/Disabled	<u>3,401,999</u>	<u>3,082,205</u>
C. Total	8,151,292	8,346,850
II. Present Value of Future Normal Cost	2,192,122	2,778,878
III. Actuarial Accrued Liability (Entry Age Normal)		
A. Actives	2,557,171	2,485,767
B. Retirees/Disabled	<u>3,401,999</u>	<u>3,082,205</u>
C. Total	5,959,170	5,567,972
IV. Plan Assets	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	5,959,170	5,567,972
VI. Funded Ratio [IV. / III.]	0.00%	0.00%
VII. Annual Covered Payroll	N/A	N/A
VIII. UAAL as % of Covered Payroll	N/A	N/A
IX. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	2,102,674	816,418
X. Number of Eligible Participants		
A. Actives	56	57
B. Retirees/Disabled	<u>42</u>	<u>40</u>
C. Total	98	97
For Fiscal Year Ending June 30, 2015		
	<u>June 30, 2015</u>	<u>June 30, 2012</u>
XI. Normal Cost	184,224	205,007
XII. Amortization of UAAL - 30 year flat dollar	231,514	231,514
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	415,738	436,521
XIV. Interest on Net OPEB Obligation (Asset)	84,106	32,657
XV. Adjustment to Annual Required Contribution	(116,922)	(70,604)
XVI. Amortization of Actuarial (Gains) / Losses	127,230	137,667
XVII. Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	510,152	536,241
XVIII. Employer Share of Costs	176,091	147,696
XIX. Employer Payments (Withdrawals) to/from OPEB Trust	0	0
XX. Total Employer Contribution [XVIII. + XIX.]	176,091	147,696
XXI. Percentage of Annual OPEB Expense Contributed	34.5%	27.5%
XXII. Net OPEB Obligation (Asset) at Beginning of Year [IX.]	2,102,674	816,418
XXIII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVII. - XX.]	334,061	388,545
XXIV. Net OPEB Obligation (Asset) at End of Year [XXII. + XXIII.]	2,436,735	1,204,963
XXV. Discount Rate	4.00%	4.00%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Hamilton Comparison of Plan Funding vs. Pay-as-you-go Funding

	<u>pay-as-you-go-4.00%</u> <u>discount rate</u>	<u>Plan Funding -7.00%</u> <u>discount rate</u>
I. Present Value of Future Benefits		
A. Actives	4,749,293	2,414,739
B. Retirees/Disabled	<u>3,401,999</u>	<u>2,400,128</u>
C. Total	8,151,292	4,814,867
II. Present Value of Future Normal Cost	2,192,122	830,464
III. Actuarial Accrued Liability (Entry Age Normal)		
A. Actives	2,557,171	1,584,275
B. Retirees/Disabled	<u>3,401,999</u>	<u>2,400,128</u>
C. Total	5,959,170	3,984,403
IV. Plan Assets	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	5,959,170	3,984,403
VI. Funded Ratio [IV. / III.]	0.00%	0.00%
VII. Annual Covered Payroll	N/A	N/A
VIII. UAAL as % of Covered Payroll	N/A	N/A
IX. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	2,102,674	2,102,674
X. Number of Eligible Participants		
A. Actives	56	56
B. Retirees/Disabled	<u>42</u>	<u>42</u>
C. Total	98	98
For Fiscal Year Ending June 30, 2015		
XI. Normal Cost	184,224	90,999
XII. Amortization of UAAL - 30 year flat dollar	231,514	299,139
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	415,738	390,138
XIV. Interest on Net OPEB Obligation (Asset)	84,106	147,187
XV. Adjustment to Annual Required Contribution	(116,922)	(158,361)
XVI. Amortization of Actuarial (Gains) / Losses	127,230	23,598
XVII. Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	510,152	402,562
XVIII. Employer Share of Costs	176,091	176,091
XIX. Employer Payments (Withdrawals) to/from OPEB Trust	0	118,295
XX. Total Employer Contribution [XVIII. + XIX.]	176,091	294,386
XXI. Percentage of Annual OPEB Expense Contributed	34.5%	73.1%
XXII. Net OPEB Obligation (Asset) at Beginning of Year [IX.]	2,102,674	2,102,674
XXIII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVII. - XX.]	334,061	108,176
XXIV. Net OPEB Obligation (Asset) at End of Year [XXII. + XXIII.]	2,436,735	2,210,850
XXV. Discount Rate	4.00%	7.00%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Hamilton

**Assuming pay-as-you-go - 4.00% discount rate
Plan Liabilities as of July 1, 2014**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	4,414,728	0	83,866	250,699	4,749,293
B. Retirees/Disabled	<u>3,105,345</u>	<u>0</u>	<u>202,315</u>	<u>94,339</u>	<u>3,401,999</u>
C. Total	7,520,073	0	286,181	345,038	8,151,292
II. Present Value of Future Normal Cost	1,998,533	0	32,015	161,574	2,192,122
III. Actuarial Accrued Liability (Entry Age Normal)					
A. Actives	2,416,195	0	51,851	89,125	2,557,171
B. Retirees/Disabled	<u>3,105,345</u>	<u>0</u>	<u>202,315</u>	<u>94,339</u>	<u>3,401,999</u>
C. Total	5,521,540	0	254,166	183,464	5,959,170
IV. Plan Assets	0	0	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	5,521,540	0	254,166	183,464	5,959,170
VI. Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A
VII. UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	1,948,257	0	89,682	64,735	2,102,674
IX. Number of Eligible Participants					
A. Actives	56	56	56	56	
B. Retirees/Disabled	<u>42</u>	<u>0</u>	<u>30</u>	<u>42</u>	
C. Total	98	56	86	98	
For Fiscal Year Ending June 30, 2015					
X. Normal Cost	171,044	0	3,519	9,661	184,224
XI. Amortization of UAAL - 30 year flat dollar	214,512	0	9,874	7,128	231,514
XII. Annual Required Contribution ('ARC') [X. + XI.]	385,556	0	13,393	16,789	415,738
XIII. Interest on Net OPEB Obligation (Asset)	77,930	0	3,587	2,589	84,106
XIV. Adjustment to Annual Required Contribution	(108,335)	0	(4,986)	(3,601)	(116,922)
XV. Amortization of Actuarial (Gains) / Losses	117,886	0	5,427	3,917	127,230
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	473,037	0	17,421	19,694	510,152
XVII. Employer Share of Costs	164,020	0	12,071	0	176,091
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	0	0	0	0	0
XIX. Total Employer Contribution [XVII. + XVIII.]	164,020	0	12,071	0	176,091
XX. Percentage of Annual OPEB Expense Contributed	34.7%	0.0%	69.3%	0.0%	34.5%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	1,948,257	0	89,682	64,735	2,102,674
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	309,017	0	5,350	19,694	334,061
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	2,257,274	0	95,032	84,429	2,436,735

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Hamilton
Plan Liabilities as of July 1, 2014
Assuming maintain pay-as-you-go funding method

	Town Employees and Retirees	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	776,489	2,497,546	937,798	359,091	178,369	4,749,293
B. Retirees/Disabled	492,836	1,621,779	432,014	487,334	368,036	3,401,999
C. Total	1,269,325	4,119,325	1,369,812	846,425	546,405	8,151,292
II. Present Value of Future Normal Cost	466,557	1,223,445	290,226	170,505	41,389	2,192,122
III. Actuarial Accrued Liability (Entry Age Normal)						
A. Actives	309,932	1,274,101	647,572	188,586	136,980	2,557,171
B. Retirees/Disabled	492,836	1,621,779	432,014	487,334	368,036	3,401,999
C. Total	802,768	2,895,880	1,079,586	675,920	505,016	5,959,170
IV. Plan Assets	0	0	0	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	802,768	2,895,880	1,079,586	675,920	505,016	5,959,170
VI. Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VII. UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	298,180	1,059,319	395,261	247,246	102,668	2,102,674
IX. Number of Eligible Participants						
A. Actives	17	19	13	5	2	56
B. Retirees/Disabled	8	17	9	5	3	42
C. Total	25	36	22	10	5	98
For Fiscal Year Ending June 30, 2015						
X. Normal Cost	53,731	83,745	29,003	13,075	4,670	184,224
XI. Amortization of UAAL - 30 year flat dollar	12,607	122,906	45,863	28,686	21,452	231,514
XII. Annual Required Contribution ("ARC") [X. + XI.]	66,338	206,651	74,866	41,761	26,122	415,738
XIII. Interest on Net OPEB Obligation (Asset)	11,927	42,373	15,810	9,890	4,106	84,106
XIV. Adjustment to Annual Required Contribution	(16,582)	(58,904)	(21,979)	(13,748)	(5,709)	(116,922)
XV. Amortization of Actuarial (Gains) / Losses	17,139	61,828	23,050	14,431	10,782	127,230
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	78,822	251,948	91,747	52,334	35,301	510,152
XVII. Employer Share of Costs	33,342	74,229	31,588	25,995	10,937	176,091
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	0	0	0	0	0	0
XIX. Total Employer Contribution [XVII. + XVIII.]	33,342	74,229	31,588	25,995	10,937	176,091
XX. Percentage of Annual OPEB Expense Contributed	42.3%	29.5%	34.4%	49.7%	31.0%	34.5%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	298,180	1,059,319	395,261	247,246	102,668	2,102,674
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	45,480	177,719	60,159	26,339	24,364	334,061
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	343,660	1,237,038	455,420	273,585	127,032	2,436,735

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Hamilton
Detail of Plan Liabilities by Group and Dependency Status
Assuming Pay-as-you-go funding - 4.00% discount rate
Plan Liabilities as of July 1, 2014

	<u>Present Value of Future Benefits</u>	<u>Actuarial Accrued Liability (Entry Age Normal)</u>	<u>Normal Cost</u>
Actives			
Under Age 65			
A. Participants	889,263	480,728	30,663
B. Spouses	<u>724,798</u>	<u>398,154</u>	<u>25,082</u>
C. Total	1,614,061	878,882	55,745
Age 65 and Over			
A. Participants	1,838,834	963,379	76,148
B. Spouses	<u>1,296,398</u>	<u>714,910</u>	<u>52,331</u>
C. Total	3,135,232	1,678,289	128,479
Actives Total			
A. Participants	2,728,097	1,444,107	106,811
B. Spouses	<u>2,021,196</u>	<u>1,113,064</u>	<u>77,413</u>
C. Total	4,749,293	2,557,171	184,224
Retirees/Disabled			
Under Age 65			
A. Participants	663,169	663,169	0
B. Spouses	<u>227,689</u>	<u>227,689</u>	<u>0</u>
C. Total	890,858	890,858	0
Age 65 and Over			
A. Participants	2,226,994	2,226,994	<u>0</u>
B. Spouses	<u>284,147</u>	<u>284,147</u>	<u>0</u>
C. Total	2,511,141	2,511,141	0
Retirees/Disabled Total			
A. Participants	2,890,163	2,890,163	0
B. Spouses	<u>511,836</u>	<u>511,836</u>	<u>0</u>
C. Total	3,401,999	3,401,999	0
Total Population			
A. Participants	5,618,260	4,334,270	106,811
B. Spouses	<u>2,533,032</u>	<u>1,624,900</u>	<u>77,413</u>
C. Total	8,151,292	5,959,170	184,224

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Hamilton

Assuming Funding over 30 years at 7.00% discount rate

Plan Liabilities as of July 1, 2014

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	2,261,764	0	38,922	114,053	2,414,739
B. Retirees/Disabled	<u>2,195,073</u>	<u>0</u>	<u>151,714</u>	<u>53,341</u>	<u>2,400,128</u>
C. Total	4,456,837	0	190,636	167,394	4,814,867
II. Present Value of Future Normal Cost	760,918	0	11,437	58,109	830,464
III. Actuarial Accrued Liability (Projected Unit Credit)					
A. Actives	1,500,846	0	27,485	55,944	1,584,275
B. Retirees/Disabled	<u>2,195,073</u>	<u>0</u>	<u>151,714</u>	<u>53,341</u>	<u>2,400,128</u>
C. Total	3,695,919	0	179,199	109,285	3,984,403
IV. Plan Assets	0	0	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	3,695,919	0	179,199	109,285	3,984,403
VI. Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A
VII. UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	1,948,257	0	89,682	64,735	2,102,674
IX. Number of Eligible Participants					
A. Actives	56	56	56	56	
B. Retirees/Disabled	<u>42</u>	<u>0</u>	<u>30</u>	<u>42</u>	
C. Total	98	56	86	98	

For Fiscal Year Ending June 30, 2015

X. Normal Cost	84,636	0	1,570	4,793	90,999
XI. Amortization of UAAL - 30 year flat dollar	277,480	0	13,454	8,205	299,139
XII. Annual Required Contribution ('ARC') [X. + XI.]	362,116	0	15,024	12,998	390,138
XIII. Interest on Net OPEB Obligation (Asset)	136,378	0	6,278	4,531	147,187
XIV. Adjustment to Annual Required Contribution	(146,732)	0	(6,754)	(4,875)	(158,361)
XV. Amortization of Actuarial (Gains) / Losses	21,890	0	1,061	647	23,598
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	373,652	0	15,609	13,301	402,562
XVII. Employer Share of Costs	164,020	0	12,071	0	176,091
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	101,456	0	3,538	13,301	118,295
XIX. Total Employer Contribution [XVII. + XVIII.]	265,476	0	15,609	13,301	294,386
XX. Percentage of Annual OPEB Expense Contributed	71.0%	0.0%	100.0%	100.0%	73.1%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	1,948,257	0	89,682	64,735	2,102,674
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	108,176	0	0	0	108,176
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	2,056,433	0	89,682	64,735	2,210,850

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Hamilton
Plan Liabilities as of July 1, 2014
Assuming Funding over 30 years at 7.00% discount rate

	Town Employees and Retirees	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	394,799	1,269,857	476,816	182,577	90,690	2,414,739
B. Retirees/Disabled	<u>347,698</u>	<u>1,144,174</u>	<u>304,788</u>	<u>343,817</u>	<u>259,651</u>	<u>2,400,128</u>
C. Total	742,497	2,414,031	781,604	526,394	350,341	4,814,867
II. Present Value of Future Normal Cost	176,751	463,490	109,949	64,594	15,680	830,464
III. Actuarial Accrued Liability (Entry Age Normal)						
A. Actives	192,016	789,359	401,198	116,837	84,865	1,584,275
B. Retirees/Disabled	<u>347,698</u>	<u>1,144,174</u>	<u>304,788</u>	<u>343,817</u>	<u>259,651</u>	<u>2,400,128</u>
C. Total	539,714	1,933,533	705,986	460,654	344,516	3,984,403
IV. Plan Assets	0	0	0	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	539,714	1,933,533	705,986	460,654	344,516	3,984,403
VI. Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VII. UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	298,180	1,059,319	395,261	247,246	102,668	2,102,674
IX. Number of Eligible Participants						
A. Actives	17	19	13	5	2	56
B. Retirees/Disabled	<u>8</u>	<u>17</u>	<u>9</u>	<u>5</u>	<u>3</u>	<u>42</u>
C. Total	25	36	22	10	5	98
For Fiscal Year Ending June 30, 2015						
X. Normal Cost	26,540	41,367	14,326	6,459	2,307	90,999
XI. Amortization of UAAL - 30 year flat dollar	16,289	158,807	59,260	37,065	27,718	299,139
XII. Annual Required Contribution ('ARC') [X. + XI.]	42,829	200,174	73,586	43,524	30,025	390,138
XIII. Interest on Net OPEB Obligation (Asset)	20,871	74,154	27,668	17,308	7,186	147,187
XIV. Adjustment to Annual Required Contribution	(22,458)	(79,781)	(29,769)	(18,621)	(7,732)	(158,361)
XV. Amortization of Actuarial (Gains) / Losses	3,178	11,468	4,275	2,677	2,000	23,598
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	44,420	206,015	75,760	44,888	31,479	402,562
XVII. Employer Share of Costs	33,342	74,229	31,588	25,995	10,937	176,091
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	16,023	57,406	20,960	13,677	10,229	118,295
XIX. Total Employer Contribution [XVII. + XVIII.]	49,365	131,635	52,548	39,672	21,166	294,386
XX. Percentage of Annual OPEB Expense Contributed	111.1%	63.9%	69.4%	88.4%	67.2%	73.1%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	298,180	1,059,319	395,261	247,246	102,668	2,102,674
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	(4,945)	74,380	23,212	5,216	10,313	108,176
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	293,235	1,133,699	418,473	252,462	112,981	2,210,850

Overview of GASB 43 and 45

GASB 43 requires retiree medical plans to disclose information about asset and liability levels and show historical contribution information. GASB 43 only applies in situations where a separate trust is established to prefund these benefits. GASB 45 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 43 and 45 apply to those benefits provided after retirement except for pension benefits such as medical insurance, 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 43 and 45 extend this practice to all other post-employment benefits.

Overview of GASB 43 and 45

(continued)

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

Turnover and retirement rates: How likely is it that an employee will qualify for post-employment benefits and when will they start?

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

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

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

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

Once the Accrued Liability and the Normal Cost have been calculated, the next step is to determine an annual contribution. This consists of two pieces:

- ✓ Normal Cost - because the benefits earned each year should be paid for each year
- ✓ Past Service Cost - a catch-up payment to fund the Accrued Liability over the next 10-30 years

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 Obligation. If you decide to fully fund the OPEB obligation 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.

Commentary on Plan Experience and Contribution Amounts

1. GASB 45 – How we got here:

The Plan adopted and implemented GASB 45 (“Accounting and Financial Reporting by Employers for Postemployment Benefits other than Pensions”) effective for the fiscal year ending June 30, 2009. GASB 45 is designed to recognize the Other Postemployment Benefits (“OPEB”) earned by employees throughout their working career vs. when they are actually paid in retirement – accrual accounting vs. “pay-as-you-go” accounting. When GASB 45 was adopted, there was an Unfunded Actuarial Accrued Liability (“UAAL”) or “past service liability” which reflected all benefits earned until the date of such adoption. To smooth the impact of transitioning to GASB 45 on your financial statement, the UAAL was amortized over a 30 year period using a flat dollar amortization. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a “Normal 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.

2. Summary of Results:

During the fiscal year ending June 30, 2015, the Plan saw an experience gain of \$475,190 or 7.39%. Plan experience was more favorable than expected. This was mainly due to premiums for Medicare integrated plans decreasing vs. an expected 19% increase, because of the change from Medex III to Medex II plans. This was somewhat offset by the introduction of a new Actuarial Cost Method in preparation for GASB 75, a more conservative mortality table, and the ACA excise tax. The actuarial experience gain is amortized into the annual OPEB costs over a 30-year period. The net impact of plan experience is a decrease in the annual OPEB cost. Please note there was a change in methodology to include spouses of retirees in the count.

Commentary on Plan Experience and Contribution Amounts
 (continued)

3. **Balance Sheet Items**

	July 1, 2014	July 1, 2011
Actuarial Accrued Liability	\$5,959,170	\$5,567,972
Plan Assets	\$0	\$0
Unfunded Actuarial Accrued Liability	\$5,959,170	\$5,567,972
Funded %	0.00%	0.00%
Net OPEB Obligation	\$2,102,674	\$816,418

4. **Income Statement Items**

	June 30, 2015	June 30, 2012
Normal Cost	\$184,224	\$205,007
Amortization of UAAL	\$231,514	\$231,514
Interest on Net OPEB Obligation	\$84,106	\$32,657
Adjustment to Annual Required Contribution	\$(116,922)	\$(70,604)
Amortization of Actuarial (Gains)/Losses	\$127,230	\$137,667
Annual OPEB Expense	\$510,152	\$536,241
Employer Share of Costs	\$176,091	\$147,696
Employer Contributions/(Withdrawals) to/from OPEB Trust	\$0	\$0
Total Employer Contribution	\$176,091	\$147,696
Discount Rate	4.00%	4.00%

Commentary on Plan Experience and Contribution Amounts
(continued)

5. **GASB 75 – Where we’re going:**

The Governmental Accounting Standards Board (“GASB”) issued GASB 75 “Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions” on June 2, 2015 which will become effective for your 2018 fiscal year. This standard will largely mirror the GASB 68 standard for pension plans. The new standards will require increased disclosure and will tie interest rates used in the valuation to the plan’s underlying investment and funding policy. This may increase the pressure on many entities to begin funding their OPEB liabilities. The final text of the GASB 75 was released on July 2, 2015 and we will be communicating more information about the new standard and the impact as more information becomes available.

SECTION IISUMMARY OF PLAN PROVISIONS

<u>Effective Date</u>	July 1, 2008; GASB 45 is adopted.
<u>Plan Year</u>	July 1 through June 30.
<u>Eligibility</u>	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Participant Contributions</u>	Participants shall pay 45% of premiums for Medical Insurance & 25% of premiums for Life insurance in retirement. Participants shall pay 100% of premiums for Dental Insurance.
<u>Benefits Offered</u>	Comprehensive Medical & Dental Insurance offered through Blue Cross Blue Shield of Massachusetts and Group Term Life Insurance through American International Group.
<u>Normal Retirement Date</u>	The normal retirement date is the first day of the month following a participant's 65th birthday.
<u>Early Retirement</u>	Early retirement is available for any participant who has attained benefit eligibility.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

A. ACTUARIAL COST METHOD

The actuarial cost method used to calculate the costs and liabilities of the plan is the Individual Entry Age Actuarial Cost Method. Under this method, the annual normal cost for each individual active members, 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, each individual's annual normal cost is a level dollar amount. The actuarial accrued liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

Actuarial gains and losses are calculated each year and amortized over a 30 year period.

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

B. ASSET VALUATION METHOD

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

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS

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

Pre- and Post-Retirement Mortality

It is assumed that both pre-retirement and post-retirement mortality are represented by the RP-2000 Mortality Table projected to 2017 for males and females.

Discount Rate

4.00% per annum (previously 4.00%)

Employee Termination

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

<u>Service</u>	<u>Non Public</u>		<u>Public</u> <u>Safety</u>
	<u>Safety Male</u>	<u>Safety Female</u>	
0	15.00%	15.00%	1.50%
5	7.60%	7.60%	1.50%
10	5.40%	5.40%	1.50%
15	3.30%	3.30%	0.00%
20	2.00%	2.00%	0.00%
25	1.00%	1.00%	0.00%
30	0.00%	0.00%	0.00%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Retirement Rates for non-teachers

It was assumed that the following percentage of eligible employees would retire each year:

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

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Healthcare Trend

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

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

Participation Rate

It was assumed that 65% of employees eligible to receive retirement benefits would enroll in the retiree medical and dental plans upon retirement. For life insurance plans, it was assumed that 65% of eligible employees would elect coverage upon retirement.

Percent Married

It was assumed that 80% of participants who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement. It was further assumed that a male spouse is three years older than a female spouse and same sex spouses are assumed to be the same age. For current retirees, the actual census information was used.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Compensation Increases

3.00% per year.

Open Group Forecast

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

Open Group Forecast Population Demographics

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

Additional Comments

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

For purposes of this valuation, retiree contributions were assumed to increase with the same trend rate as health care claims.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely on the retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

- ✓ The cost sharing program is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:
- ✓ The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an "implicit subsidy". GASB 43 and 45 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. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based factors developed by actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page.

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents' coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program - different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - Based on Active & Retiree Incurred Claims & Premiums

	Number of Participants			
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
Network Blue HMO	20		44	64
Blue Care Elect Preferred PPO	2			2
Medex III	23			23
Total	45	0	44	89

	Per Contract Costs (monthly) - FY 2015		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Network Blue HMO	735.76	0.00	1,931.64
Blue Care Elect Preferred PPO	946.39	0.00	2,485.57
Medex III	355.69	711.38	

Gross Expected FY 2015 Incurred Premiums	1,317,372
Adjustment to reflect children's claims	(242,943)
Total Expected FY 2015 Incurred Premiums (adults only)	1,074,429

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

	<u>Employer Primary</u>	<u>Medicare Primary</u>
Age 65	12,654	4,268
Average Age	9,989	4,268

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

III. BREAKDOWN OF CLAIM COSTS

1,074,429 Active and Retired Claims (No Children)

ALL ACTIVE EMPLOYEES AND SPOUSES (non-GIC)

Age Bracket	Number of Females	Number of Males	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
24 & Under	0	1	1.312	0.549	7,763	3,248	3,248
25 to 29	0	1	1.312	0.591	7,763	3,497	3,497
30 to 34	2	4	1.312	0.712	7,763	4,213	32,378
35 to 39	7	3	1.312	0.850	7,763	5,029	69,428
40 to 44	2	0	1.312	1.000	7,763	5,917	15,526
45 to 49	5	7	1.456	1.193	8,615	7,059	92,488
50 to 54	11	11	1.599	1.441	9,461	8,526	197,857
55 to 59	7	6	1.740	1.753	10,296	10,373	134,310
60 to 64	3	3	1.968	2.102	11,645	12,438	72,249
65 to 69	1	0	2.168	2.316	12,828	13,704	12,828
70 & Over	0	0	2.396	2.557	14,177	15,130	0
Total	38	36					633,809

ALL RETIREES AND SPOUSES - NOT MEDICARE ELIGIBLE (non-GIC)

Age Bracket	Number of Females	Number of Males	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
44 & Under	3	2	1.312	1.000	7,763	5,917	35,123
45 to 49	1	5	1.456	1.193	8,615	7,059	43,910
50 to 54	2	2	1.599	1.441	9,461	8,526	35,974
55 to 59	6	1	1.740	1.753	10,296	10,373	72,149
60 to 64	3	4	1.968	2.102	11,645	12,438	84,687
65 to 69	1	1	2.168	2.316	12,828	13,704	26,532
70 to 74	0	1	2.396	2.557	14,177	15,130	15,130
75 to 79	0	0	2.593	2.769	15,343	16,384	0
80 to 84	1	0	2.724	2.910	16,118	17,218	16,118
85 to 89	0	0	2.864	3.059	16,946	18,100	0
90 & Over	0	0	3.010	3.215	17,810	19,023	0
Total	17	16					329,623

ALL RETIREES AND SPOUSES - MEDICARE ELIGIBLE (non-GIC)

Age Bracket	Number of Females	Number of Males	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
65 to 69	4	3	2.168	2.316	4,268	4,268	29,876
70 to 74	8	3	2.396	2.557	4,268	4,268	46,948
75 to 79	0	3	2.593	2.769	4,268	4,268	12,804
80 to 84	2	0	2.724	2.910	4,268	4,268	8,536
85 to 89	0	2	2.864	3.059	4,268	4,268	8,536
90 & Over	0	1	3.010	3.215	4,268	4,268	4,268
Total	14	12					110,968
Grand Totals	69	64					1,074,400

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

E. DEVELOPMENT OF REPRESENTATIVE DENTAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - with Active & Retiree Incurred Premiums

	Per Contract Costs (monthly) - FY 2015		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Dental Plan	N/A		N/A
FY 2015 Expected Per Person Rate			N/A

EXHIBIT AFinancial Statement Disclosure

(As of July 1, 2014)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions requires the following disclosures in the financial statements with regard to the retiree medical and life insurance benefits;

1. A DESCRIPTION OF THE RETIREE MEDICAL INSURANCE PROGRAM:

- a. Plan Type: Various Medical Insurance offerings via the Blue Cross Blue Shield of Massachusetts.
- b. Administrator: Town of Hamilton
- c. Eligibility: An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
- d. Cost Sharing: Employees will pay 45% of premiums in retirement

2. A DESCRIPTION OF THE DENTAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Dental Insurance
- b. Administrator: Town of Hamilton
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 100% of premiums in retirement

3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

- a. Plan Type: Group Term Life Insurance - \$15,000
- b. Administrator: Town of Hamilton
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 25% of premiums in retirement.

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2014)

(continued)

4. RETIREE MEDICAL AND LIFE INSURANCE CONTRIBUTIONS:

Group	Individual	Family
Medical	45%	45%
Dental	100%	100%
Life	25%	N/A

5. FUNDING POLICY

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The required contribution is based on the projected pay-as-you-go financing requirements. For the 2015 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$176,091. The Town is also projected to make a contribution to an OPEB Trust of \$0 for the 2015 fiscal year for a total contribution of \$176,091 .

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2014)

(continued)

6. ANNUAL OPEB COST AND NET OPEB OBLIGATION

The Town's annual other postemployment benefit ("OPEB") cost (expense) is calculated based on the annual required contribution of the employer ("ARC"), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty (30) years. The following table shows the components of the Town's annual OPEB costs for the fiscal year, the amount actually contributed to the plan and changes in the Town's net OPEB obligation to the plan:

Annual Required Contribution	\$415,738
Interest on net OPEB Obligation (Asset)	\$84,106
Adjustment to annual required contribution	(\$116,922)
Amortization of Actuarial (Gains) / Losses	\$127,230
Annual OPEB expense	\$510,152
Contributions made to pay benefits	\$176,091
Contributions made to OPEB Trust	\$0
Increase (Decrease) in net OPEB Obligation (Asset)	\$334,061
Net OPEB Obligation (Asset) – beginning of year	\$2,102,674
Net OPEB Obligation (Asset) – end of year	\$2,436,735

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2014)

(continued)

The Town's annual OPEB cost, the percentage of the annual OPEB cost contributed to the plan, and the net OPEB obligation for the 2015 fiscal year and the three preceding years were as follows:

Fiscal Year Ended	Annual OPEB Cost	Expected Employer Payments	Percentage of OPEB Cost Contributed	Increase (Decrease) in Net OPEB Obligation (Asset)	Net OPEB Obligation (Asset)
06/30/2017 (est.)	\$552,340	\$197,719	35.8%	\$354,621	\$3,133,075
06/30/2016 (est.)	\$530,793	\$189,074	35.6%	\$341,719	\$2,778,454
06/30/2015	\$510,152	\$176,091	34.5%	\$334,061	\$2,436,735
06/30/2014	\$639,878	\$173,297	27.1%	\$466,581	\$2,102,674
06/30/2013	\$590,426	\$159,296	27.0%	\$431,130	\$1,636,093
06/30/2012	\$536,241	\$147,696	27.5%	\$388,545	\$1,204,963

Schedule of Funding Progress:

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
07/01/2016 (est.)	\$0	\$6,456,754	\$6,456,754	0.0%	N/A	N/A
07/01/2015 (est.)	\$0	\$6,205,988	\$6,205,988	0.0%	N/A	N/A
07/01/2014	\$0	\$5,959,170	\$5,959,170	0.0%	N/A	N/A
07/01/2013	\$0	\$6,309,571	\$6,309,571	0.0%	N/A	N/A
07/01/2012	\$0	\$5,915,872	\$5,915,872	0.0%	N/A	N/A
07/01/2011	\$0	\$5,567,972	\$5,567,972	0.0%	N/A	N/A

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2014)
(continued)

Fiscal Year Ending June 30, 2015						
	Town Employees and Retirees	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	Total
OPEB Obligation (Asset) at beginning of year	298,180	1,059,319	395,261	247,246	102,668	2,102,674
Annual Required Contribution	66,338	206,651	74,866	41,761	26,122	415,738
Interest on Net OPEB Obligation	11,927	42,373	15,810	9,890	4,106	84,106
Adjustment to the ARC	(16,582)	(58,904)	(21,979)	(13,748)	(5,709)	(116,922)
Amortization of Actuarial (Gains)/Losses	17,139	61,828	23,050	14,431	10,782	127,230
Annual OPEB Cost	78,822	251,948	91,747	52,334	35,301	510,152
Expected Employer Contribution	33,342	74,229	31,588	25,995	10,937	176,091
Contribution (Withdrawal) to/from Trust Fund over 30 Years	-	-	-	-	-	-
Total Expected Employer Payments	33,342	74,229	31,588	25,995	10,937	176,091
Increase (Decrease) in OPEB Obligation (Asset)	45,480	177,719	60,159	26,339	24,364	334,061
OPEB Obligation (Asset) at end of year	343,660	1,237,038	455,420	273,585	127,032	2,436,735
AAL as of July 1, 2014	802,768	2,895,880	1,079,586	675,920	505,016	5,959,170
Plan Assets as of July 1, 2014	-	-	-	-	-	-
Unfunded Actuarial Liability as of July 1, 2014	802,768	2,895,880	1,079,586	675,920	505,016	5,959,170

Fiscal Year Ending June 30, 2016						
	Town Employees and Retirees	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	Total
OPEB Obligation (Asset) at beginning of year	343,660	1,237,038	455,420	273,585	127,032	2,436,735
Annual Required Contribution	67,499	210,269	76,177	42,492	26,579	423,016
Interest on Net OPEB Obligation	13,823	49,105	18,322	11,461	4,758	97,469
Adjustment to the ARC	(19,216)	(68,262)	(25,471)	(15,932)	(6,616)	(135,497)
Amortization of Actuarial (Gains)/Losses	19,906	71,030	26,431	16,430	12,008	145,805
Annual OPEB Cost	82,012	262,142	95,459	54,451	36,729	530,793
Expected Employer Contribution	35,800	79,702	33,917	27,912	11,743	189,074
Contribution (Withdrawal) to/from Trust Fund over 30 Years	-	-	-	-	-	-
Total Expected Employer Payments	35,800	79,702	33,917	27,912	11,743	189,074
Increase (Decrease) in OPEB Obligation (Asset)	46,212	182,440	61,542	26,539	24,986	341,719
OPEB Obligation (Asset) at end of year	389,872	1,419,478	516,962	300,124	152,018	2,778,454
AAL as of July 1, 2015	836,018	3,015,822	1,124,300	703,915	525,933	6,205,988
Plan Assets as of July 1, 2015	-	-	-	-	-	-
Unfunded Actuarial Liability as of July 1, 2015	836,018	3,015,822	1,124,300	703,915	525,933	6,205,988

Fiscal Year Ending June 30, 2017						
	Town Employees and Retirees	Public Safety Employees and Retirees	Public Service Employees and Retirees	Joint Employees and Retirees	Water Enterprise Employees and Retirees	Total
OPEB Obligation (Asset) at beginning of year	389,872	1,419,478	516,962	300,124	152,018	2,778,454
Annual Required Contribution	68,757	214,184	77,595	43,283	27,074	430,893
Interest on Net OPEB Obligation	15,762	55,992	20,892	13,068	5,425	111,139
Adjustment to the ARC	(21,910)	(77,835)	(29,043)	(18,166)	(7,544)	(154,498)
Amortization of Actuarial (Gains)/Losses	22,733	80,442	29,890	18,476	13,265	164,806
Annual OPEB Cost	85,342	272,783	99,334	56,661	38,220	552,340
Expected Employer Contribution	37,437	83,346	35,468	29,188	12,280	197,719
Contribution (Withdrawal) to/from Trust Fund over 30 Years	-	-	-	-	-	-
Total Expected Employer Payments	37,437	83,346	35,468	29,188	12,280	197,719
Increase (Decrease) in OPEB Obligation (Asset)	47,905	189,437	63,866	27,473	25,940	354,621
OPEB Obligation (Asset) at end of year	437,777	1,608,915	580,828	327,597	177,958	3,133,075
AAL as of July 1, 2016	869,799	3,137,683	1,169,730	732,358	547,184	6,456,754
Plan Assets as of July 1, 2016	-	-	-	-	-	-
Unfunded Actuarial Liability as of July 1, 2016	869,799	3,137,683	1,169,730	732,358	547,184	6,456,754

EXHIBIT AFinancial Statement Disclosure

(As of July 1, 2014)

(continued)

7. FUNDED STATUS AND FUNDING PROGRESS

As of July 1, 2014, the most recent valuation date, the plan was 0.00% funded. The actuarial liability for benefits was \$5,959,170, and the actuarial value of assets was \$ 0, resulting in an unfunded actuarial accrued liability (UAAL) of \$5,959,170. The covered payroll (annual payroll of active employees covered by the plan) was \$ N/A and the ratio of the UAAL to the covered payroll was N/A.

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

8. EFFECT OF 1% CHANGE IN HEALTHCARE TREND RATES

In the event that healthcare trend rates were 1% higher than forecast and employee contributions were to increase at the forecast rates, the Actuarial Accrued Liability would increase to \$7,845,175 or by 31.6% and the corresponding Normal Cost would increase to \$275,835 or by 49.7%. If such healthcare trend rates were 1% less than forecast and employee contributions were to increase at the forecast rate, the Actuarial Accrued Liability would decrease to \$4,491,074 or by 24.6% and the corresponding Normal Cost would decrease to \$116,852 or by 36.6%.

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2014)

(continued)

9. ACTUARIAL METHODS AND ASSUMPTIONS

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Actuarial Cost Method: Projected Unit Credit
 Investment Rate of Return: 4.00% per annum (previously 4.00%)
 Healthcare Trend Rates

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

General Inflation Assumption: 2.50% per annum
 Annual Compensation Increases: 3.00% per annum
 Actuarial Value of Assets: Market Value
 Amortization of UAAL: Level dollar amortization over 30 years at the last valuation
 Remaining Amortization Period: 24 years at July 1, 2014

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2014)

(continued)

10. Remaining Amortization Bases

The initial Actuarial Accrued Liability as of the date GASB 45 was adopted is amortized as a component of the Annual Required Contribution ("ARC"). The Unfunded Actuarial Accrued Liability at transition was amortized over a 30 year period and a flat dollar amortization of the Unfunded Actuarial Accrued Liability at transition. For years subsequent to the initial adoption of GASB 45, cumulative gains/losses are amortized on a level dollar basis over a 30 year period. Gains and losses arise from experience and contribution deficiencies and excess contributions in relation to each year's ARC under GASB 45.

Changes in Unfunded Actuarial Liability Since Prior Valuation
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Expected Unfunded Actuarial Liability

1. Actuarial Accrued Liability at prior valuation date	5,567,972
2. Actuarial Value of Assets at prior valuation date	<u>0</u>
3. Unfunded Actuarial Accrued Liability at prior valuation date [1. - 2.]	5,567,972
4. Normal Cost for prior periods	615,021
5. Employer Contributions for prior periods	(480,289)
6. Interest to current valuation date	<u>731,656</u>
7. Expected Unfunded Actuarial Accrued Liability [3. + 4. + 5. + 6.]	6,434,360

Actual Unfunded Actuarial Liability

8. Actuarial Accrued Liability at current valuation date	5,959,170
9. Actuarial Value of Assets at current valuation date	<u>0</u>
10. Unfunded Actuarial Accrued Liability at current valuation date [8. - 9.]	5,959,170

Net Actuarial (Gain) / Loss from Plan Experience [10. - 7.] **(475,190)**

11. Unfunded Actuarial Accrued Liability at current valuation date [10.]	5,959,170
12. Remaining Initial Unfunded to be amortized	<u>3,671,081</u>
13. Actuarial (Gain) / Loss to be amortized: [11. - 12.]	2,288,089

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2014)
(continued)

Amortization of Initial Unfunded and Plan Experience under GASB 45						
Date Established	Description	Initial Amount	Initial Amortization Period	Remaining Balance at Valuation Date	Remaining Amortization Period	Annual Amortization Payment
July 1, 2008	GASB 45 Liability	4,163,491	30	3,671,081	24	231,514
July 1, 2014	Cumulative (Gain) / Loss	2,288,089	30	2,288,089	30	127,230
July 1, 2014	Adjustment to ARC	(2,102,674)	30	(2,102,674)	30	(116,921)
Total				3,856,496		241,823

11. Recognition of OPEB trust assets

The State of Massachusetts has recently passed legislation allowing municipal entities to establish a trust for Other Postemployment Benefits (“OPEB”) under M.G.L. Chapter 32B, Section 20 for purposes of accumulating assets to pre-fund the liabilities under GASB 45. To the best of our knowledge, Town of Hamilton has not established an irrevocable trust for the purposes of prefunding liabilities under GASB 45.

EXHIBIT AFinancial Statement Disclosure

(As of July 1, 2014)

(continued)

12. Impact of Patient Protection and Affordable Care Act ("PPACA") Excise Tax

Under the Patient Protection and Affordable Care Act ("PPACA"), an excise tax will be imposed for tax years beginning after December 31, 2017 for high cost employer sponsored health coverage. The law specifies a 40% excise tax to be paid by the provider of such coverage of the excess value beyond a basic dollar amount plus an additional "kicker" for qualified retirees or those engaged in a high risk profession. The basic dollar amount for 2018 is \$10,200 for single coverage and \$27,500 for family coverage and the "kicker" amount for 2018 is \$1,650 for single coverage and \$3,450 for family coverage.

The excise tax liability will vary significantly over time as it is highly leveraged with the basic amount increased with general CPI and medical costs increasing with medical trend (generally higher). For purposes of the fiscal year ending June 30, 2015, the AAL for the excise tax is \$183,464 and the increase in annual OPEB Cost is \$19,694. Given your premiums through the 2015 fiscal year and the excise tax threshold, your single premiums are within 54.31% of the excise tax and your family premiums are within 18.64% of the excise tax. As more regulatory guidance becomes available, the calculation of the excise tax liability will evolve.

EXHIBIT AFinancial Statement Disclosure

(As of July 1, 2014)

(continued)

13. Impact of Section 9A 1/2 of M.G.L. Chapter 32B

For employees who retire on or after January 1, 2011 whenever a retired employee or beneficiary receives a healthcare premium contribution from a governmental unit in a case where a portion of the retiree's creditable service is attributable to service in 1 or more other governmental units, the first governmental unit shall be reimbursed in full, in accordance with this paragraph, by the other governmental units for the portion of the premium contributions that corresponds to the percentage of the retiree's creditable service that is attributable to each governmental unit. The other governmental units shall be charged based on their own contribution rate or the contribution rate of the first employer, whichever is lower.

For purposes of the valuation we have not attempted to value the impact of prior governmental service at other entities in the State of Massachusetts for current employees of the Town of Hamilton nor have we attempted to value the impact of prior Town of Hamilton employees currently working at other governmental entities in the State of Massachusetts.

EXHIBIT B
Reconciliation of Plan Participation
 (As of July 1, 2014)

ACTIVE EMPLOYEES

	<u>July 1, 2014</u>	<u>July 1, 2011</u>
A. Average Age at Hire	35.98	37.37
B. Average Service	11.76	11.08
C. Average Current Age	47.74	48.45

RETIRED EMPLOYEES & DEPENDENTS

	<u>July 1, 2014</u>	<u>July 1, 2011</u>
I. Retirees		
A. Under Age 65	10	N/A
B. Age 65 & Over	<u>27</u>	<u>N/A</u>
C. Total Retirees	37	N/A
II. Dependents of Retirees		
A. Under Age 65	4	N/A
B. Age 65 & Over	<u>1</u>	<u>N/A</u>
C. Total Retirees	5	N/A
III. Retirees & Dependents		
A. Under Age 65	14	N/A
B. Age 65 & Over	<u>28</u>	<u>N/A</u>
C. Total Retirees	42	N/A

EXHIBIT C

Projected Cash Flows (Open Group) – pay-as-you-go Approach

Total Medical, Dental & Life Insurance - pay-as-you-go - 4.00% discount rate

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of		III. Unfunded Accrued Actuarial Liability ("UAAL")		VI. Interest on Net OPEB Obligation		VII. Adjustment to ARC	VIII. Amortization of Actuarial (Gain) / Loss	IX. Expected Annual OPEB Expense [IV. + V. + VI. + VII. + VIII.]		X. OPEB Obligation (Asset) as of June 30	XI. Employer Share of Premiums / Claims	XII. Excess Employer Payments (beyond claims)
	July 1	II. Plan Assets as of July 1	[I. - II.]	IV. Normal Cost	V. Expected Amortization	(Asset)			Expenses	Expenses			
2015	5,959,170	0	5,959,170	184,224	231,514	84,106	(116,922)	127,230	510,152	2,102,674	176,091	0	
2016	6,205,988	0	6,205,988	191,502	231,514	97,469	(135,497)	145,805	530,793	2,778,454	189,074	0	
2017	6,456,754	0	6,456,754	199,379	231,514	111,139	(154,498)	164,806	552,340	3,133,075	197,719	0	
2018	6,716,749	0	6,716,749	207,332	231,514	125,323	(174,218)	184,526	574,477	3,502,771	204,781	0	
2019	6,988,073	0	6,988,073	215,783	231,514	140,111	(194,774)	205,082	597,716	3,872,056	228,431	0	
2020	7,254,444	0	7,254,444	225,135	231,514	154,882	(215,309)	225,617	621,839	4,264,650	229,245	0	
2021	7,540,348	0	7,540,348	234,290	231,514	170,586	(237,140)	247,448	646,698	4,669,707	241,641	0	
2022	7,834,315	0	7,834,315	248,080	231,514	186,789	(259,663)	269,971	676,691	5,086,523	259,875	0	
2023	8,135,422	0	8,135,422	256,652	231,514	203,461	(282,840)	293,148	701,935	5,507,699	280,759	0	
2024	8,433,562	0	8,433,562	268,587	231,514	220,307	(306,261)	316,569	730,716	5,940,991	297,424	0	
2025	8,740,913	0	8,740,913	283,811	231,514	237,639	(330,354)	340,662	763,272	6,375,360	328,903	0	
2026	9,043,653	0	9,043,653	296,625	231,514	255,014	(354,507)	364,815	793,461	6,809,943	358,878	0	
2027	9,338,164	0	9,338,164	309,772	231,514	272,398	(378,673)	388,981	823,992	7,257,589	376,346	0	
2028	9,642,455	0	9,642,455	324,655	231,514	290,303	(403,564)	413,872	856,780	7,700,734	413,635	0	
2029	9,935,614	0	9,935,614	339,208	231,514	308,028	(428,206)	438,514	889,058	8,152,372	437,420	0	
2030	10,230,897	0	10,230,897	353,357	231,514	326,095	(453,319)	463,627	921,274	8,620,759	452,887	0	
2031	10,536,622	0	10,536,622	368,116	231,514	344,830	(479,364)	489,672	954,768	9,113,438	462,089	0	
2032	10,844,420	0	10,844,420	382,340	231,514	364,538	(506,761)	517,069	988,700	9,634,110	468,028	0	
2033	11,189,081	0	11,189,081	400,353	231,514	385,363	(535,712)	546,020	1,027,538	10,173,224	488,424	0	
2034	11,515,367	0	11,515,367	415,458	231,514	406,929	(565,691)	575,999	1,064,209	10,791,079	446,354	0	
2035	11,927,661	0	11,927,661	432,827	231,514	431,643	(600,047)	610,355	1,106,292	11,449,651	447,720	0	
2036	12,366,037	0	12,366,037	450,192	231,514	457,987	(636,668)	646,976	1,150,001	12,128,314	471,338	0	
2037	12,837,015	0	12,837,015	469,369	231,514	485,133	(674,405)	684,713	1,196,324	12,840,859	483,779	0	
2038	13,335,508	0	13,335,508	489,136	231,514	513,634	(714,027)	724,335	1,244,592	13,567,563	517,888	0	
2039	13,889,744	0	13,889,744	509,289	0	542,703	(754,436)	764,744	1,062,300	14,076,448	553,415	0	
2040	14,395,607	0	14,395,607	531,305	0	563,057	(782,732)	793,040	1,104,670	14,603,529	577,589	0	
2041	14,923,294	0	14,923,294	557,140	0	584,141	(812,041)	822,349	1,151,589	15,134,280	620,838	0	
2042	15,458,083	0	15,458,083	582,119	0	605,371	(841,555)	851,863	1,197,798	15,667,715	664,363	0	
2043	15,990,872	0	15,990,872	609,201	0	626,709	(871,217)	881,525	1,246,218	16,228,538	685,395	0	
2044	16,551,265	0	16,551,265	637,197	0	649,142	(902,402)	912,710	1,296,647	16,820,220	704,965	0	
2045	17,179,850	0	17,179,850	667,242	0	672,808	(935,303)	935,303	1,340,050	17,438,349	721,921	0	
2046	17,810,178	0	17,810,178	698,002	0	697,535	(969,675)	969,675	1,395,537	18,087,311	746,575	0	

EXHIBIT D

Projected Cash Flows (Open Group) - Funded Approach

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate increasing at 0.00% per year

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of	II. Plan Assets as of July 1	III. Unfunded Accrued Actuarial Liability ("AAL") [I. - II.]	IV. Normal Cost	V. Expected Amortization	VI. Interest on Net OPEB Obligation (Asset)	VII. Adjustment to ARC	VIII. Amortization of Actuarial (Gain) / Loss	IX. Expected Annual OPEB Expense [IV. + V. + VI. + VII. + VIII.]	X. OPEB Obligation (Asset) as of June 30	XI. Employer Share of Premiums / Claims	XII. Annual Funding / (Payments)
	July 1											
2015	3,984,403	0	3,984,403	90,999	299,139	147,187	(158,361)	23,598	402,562	2,210,850	176,091	118,295
2016	4,050,200	118,295	3,931,905	89,123	299,139	154,759	(166,508)	31,745	413,412	2,316,893	189,074	118,295
2017	4,226,766	244,871	3,981,895	92,450	299,139	162,182	(174,495)	39,732	424,475	2,425,354	197,719	118,295
2018	4,410,002	380,307	4,029,695	95,987	299,139	169,775	(182,663)	47,900	435,849	2,538,127	204,781	118,295
2019	4,602,294	525,223	4,077,071	99,874	299,139	177,669	(191,157)	56,394	447,838	2,639,239	228,431	118,295
2020	4,787,207	680,284	4,106,923	104,267	299,139	184,747	(198,772)	64,009	459,506	2,751,205	229,245	118,295
2021	4,989,109	846,199	4,142,910	108,652	299,139	192,584	(207,205)	72,442	471,882	2,863,151	241,641	118,295
2022	5,197,539	1,023,728	4,173,811	115,378	299,139	200,420	(215,636)	80,873	486,634	2,971,615	259,875	118,295
2023	5,410,399	1,213,684	4,196,715	119,239	299,139	208,013	(223,805)	89,042	498,207	3,070,768	280,759	118,295
2024	5,621,131	1,416,937	4,204,194	124,904	299,139	214,954	(231,272)	96,509	510,946	3,165,995	297,424	118,295
2025	5,837,483	1,634,418	4,203,065	132,585	299,139	221,619	(238,444)	103,681	525,403	3,244,200	328,903	118,295
2026	6,047,205	1,867,122	4,180,083	138,855	299,139	227,094	(244,334)	109,571	537,217	3,304,244	358,878	118,295
2027	6,248,524	2,116,116	4,132,408	145,280	299,139	231,297	(248,856)	114,093	547,881	3,357,484	376,346	118,295
2028	6,455,074	2,382,539	4,072,535	152,640	299,139	235,024	(252,866)	118,103	558,962	3,384,516	413,635	118,295
2029	6,649,343	2,667,612	3,981,731	159,741	299,139	236,916	(254,902)	120,139	567,901	3,396,702	437,420	118,295
2030	6,839,853	2,972,640	3,867,213	166,654	299,139	237,769	(255,820)	121,057	575,600	3,401,120	452,887	118,295
2031	7,035,707	3,299,020	3,736,687	173,923	299,139	238,078	(256,152)	121,389	583,102	3,403,838	462,089	118,295
2032	7,231,776	3,648,246	3,583,530	180,829	299,139	238,268	(256,357)	121,594	590,076	3,407,591	468,028	118,295
2033	7,454,232	4,021,918	3,432,314	189,682	299,139	238,531	(256,640)	121,877	599,107	3,399,979	488,424	118,295
2034	7,669,096	4,421,747	3,247,349	197,119	299,139	237,998	(256,067)	121,304	605,920	3,441,250	446,354	118,295
2035	7,954,827	4,849,564	3,105,263	205,610	299,139	240,887	(259,175)	124,412	617,198	3,492,433	447,720	118,295
2036	8,264,093	5,307,328	2,956,765	214,015	299,139	244,470	(263,030)	128,267	629,085	3,531,885	471,338	118,295
2037	8,590,724	5,797,136	2,793,588	223,384	299,139	247,232	(266,001)	131,238	641,115	3,570,926	483,779	118,295
2038	8,936,937	6,321,231	2,615,706	233,087	299,139	249,965	(268,941)	134,178	653,422	3,588,165	517,888	118,295
2039	9,331,888	6,882,012	2,449,876	242,964	0	251,171	(270,240)	135,477	365,220	3,281,675	553,415	118,295
2040	9,686,885	7,482,048	2,204,837	253,954	0	229,717	(247,157)	112,394	354,559	2,940,350	577,589	118,295
2041	10,054,354	8,124,086	1,930,268	266,923	0	205,824	(221,450)	86,687	343,428	2,544,645	620,838	118,295
2042	10,427,554	8,811,067	1,616,487	279,448	0	178,125	(191,648)	56,885	328,045	2,090,032	664,363	118,295
2043	10,793,140	9,546,137	1,247,003	292,936	0	146,302	(157,409)	22,646	309,524	1,595,866	685,395	118,295
2044	11,174,196	10,332,662	841,534	306,904	0	111,710	(120,191)	(14,572)	288,694	1,061,300	704,965	118,295
2045	11,601,756	11,174,243	427,513	321,898	0	74,291	(79,930)	79,930	400,819	621,903	721,921	118,295
2046	12,017,378	12,074,735	(57,357)	337,137	0	43,533	(46,837)	46,837	385,105	317,790	746,575	(57,357)

EXHIBIT D

Projected Cash Flows (Open Group) - Funded Approach

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate and increasing at 2.50% per year

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of July 1	II. Plan Assets as of July 1	III. Unfunded Accrued Actuarial Liability ("UAAL") [I. - II.]	IV. Normal Cost	V. Expected Amortization	VI. Interest on Net OPEB Obligation (Asset)	VII. Adjustment to ARC	VIII. Amortization of Actuarial (Gain) / Loss	IX. Expected Annual OPEB Expense [IV. + V. + VI. + VII. + VIII.]	X. OPEB Obligation (Asset) as of June 30	XI. Employer Share of Premiums / Claims	XII. Annual Funding / (Payments)
2015	3,984,403	0	3,984,403	90,999	299,139	147,187	(158,361)	23,598	402,562	2,102,674	176,091	91,182
2016	4,050,200	91,182	3,959,018	89,123	299,139	154,759	(166,508)	31,745	413,412	2,237,963	189,074	93,461
2017	4,226,766	191,026	4,035,740	92,450	299,139	162,182	(174,495)	39,732	424,475	2,499,798	197,719	95,798
2018	4,410,002	300,196	4,109,806	95,987	299,139	169,775	(182,663)	47,900	435,849	2,632,673	204,781	98,193
2019	4,602,294	419,403	4,182,891	99,874	299,139	177,669	(191,157)	56,394	447,838	2,751,432	228,431	100,648
2020	4,787,207	549,409	4,237,798	104,267	299,139	184,747	(198,772)	64,009	459,506	2,878,529	229,245	103,164
2021	4,989,109	691,032	4,298,077	108,652	299,139	192,584	(207,205)	72,442	471,882	3,003,027	241,641	105,743
2022	5,197,539	845,147	4,352,392	115,378	299,139	200,420	(215,636)	80,873	486,634	3,121,399	259,875	108,387
2023	5,410,399	1,012,694	4,397,705	119,239	299,139	208,013	(223,805)	89,042	498,207	3,227,750	280,759	111,097
2024	5,621,131	1,194,680	4,426,451	124,904	299,139	214,954	(231,272)	96,509	510,946	3,327,398	297,424	113,874
2025	5,837,483	1,392,182	4,445,301	132,585	299,139	221,619	(238,444)	103,681	525,403	3,407,177	328,903	116,721
2026	6,047,205	1,606,356	4,440,849	138,855	299,139	227,094	(244,334)	109,571	537,217	3,465,877	358,878	119,639
2027	6,248,524	1,838,440	4,410,084	145,280	299,139	231,297	(248,856)	114,093	547,881	3,514,782	376,346	122,630
2028	6,455,074	2,089,761	4,365,313	152,640	299,139	235,024	(252,866)	118,103	558,962	3,534,413	413,635	125,696
2029	6,649,343	2,361,740	4,287,603	159,741	299,139	236,916	(254,902)	120,139	567,901	3,536,056	437,420	128,838
2030	6,839,853	2,655,900	4,183,953	166,654	299,139	237,769	(255,820)	121,057	575,600	3,526,710	452,887	132,059
2031	7,035,707	2,973,872	4,061,835	173,923	299,139	238,078	(256,152)	121,389	583,102	3,512,363	462,089	135,360
2032	7,231,776	3,317,403	3,914,373	180,829	299,139	238,268	(256,357)	121,594	590,076	3,495,667	468,028	138,744
2033	7,454,232	3,688,365	3,765,867	189,682	299,139	238,531	(256,640)	121,877	599,107	3,464,137	488,424	142,213
2034	7,669,096	4,088,764	3,580,332	197,119	299,139	237,998	(256,067)	121,304	605,920	3,477,935	446,354	145,768
2035	7,954,827	4,520,745	3,434,082	205,610	299,139	240,887	(259,175)	124,412	617,198	3,498,001	447,720	149,412
2036	8,264,093	4,986,609	3,277,484	214,015	299,139	244,470	(263,030)	128,267	629,085	3,502,601	471,338	153,147
2037	8,590,724	5,488,819	3,101,905	223,384	299,139	247,232	(266,001)	131,238	641,115	3,502,961	483,779	156,976
2038	8,936,937	6,030,012	2,906,925	233,087	299,139	249,965	(268,941)	134,178	653,422	3,477,595	517,888	160,900
2039	9,331,888	6,613,013	2,718,875	242,964	0	251,171	(270,240)	135,477	365,220	3,124,477	553,415	164,923
2040	9,686,885	7,240,847	2,446,038	253,954	0	229,717	(247,157)	112,394	354,559	2,732,401	577,589	169,046
2041	10,054,354	7,916,752	2,137,602	266,923	0	205,824	(221,450)	86,687	343,428	2,281,719	620,838	173,272
2042	10,427,554	8,644,197	1,783,357	279,448	0	178,125	(191,648)	56,885	328,045	1,767,797	664,363	177,604
2043	10,793,140	9,426,895	1,366,245	292,936	0	146,302	(157,409)	22,646	309,524	1,209,882	685,395	182,044
2044	11,174,196	10,268,822	905,374	306,904	0	111,710	(120,191)	(14,572)	288,694	607,016	704,965	186,595
2045	11,601,756	11,174,235	427,521	321,898	0	74,291	(79,930)	79,930	400,819	94,654	721,921	191,260

EXHIBIT D

Projected Cash Flows (Open Group) - Funded Approach

Total Medical, Dental & Life Insurance - Funding Annual Normal Cost - 4.00% discount rate												
Fiscal Year	I. Total Actuarial Accrued Liability ("AAL")	II. Normal Cost	III. Employer Share of Premiums / Claims including "implicit cost"	IV. Funding Normal Cost beyond claims	V. Total Funding Costs [III. + IV.]	VI. Present Value at 4.00% of Employer Share of Premiums / Claims including "implicit cost"	VII. Present Value at 4.00% of Funding Normal Cost beyond claims	VIII. Present Value at 4.00% of Total Funding Costs + VII.]	IX. Plan Assets at Beginning of year	X. Unfunded Accrued Actuarial Liability ["UAAAL"] [I. - IX.]	XI. Present Value at 4.00% of Unfunded Accrued Actuarial Liability ("UAAAL")	
2015	5,959,170	184,224	176,091	8,133	184,224	176,091	8,133	184,224	0	5,959,170	5,959,170	
2016	6,205,988	191,502	189,074	2,428	191,502	181,802	2,335	184,137	8,133	6,197,855	5,959,476	
2017	6,456,754	199,379	197,719	1,660	199,379	182,802	1,535	184,337	10,886	6,445,868	5,959,567	
2018	6,716,749	207,332	204,781	2,551	207,332	182,050	2,268	184,318	12,981	6,703,768	5,959,625	
2019	6,988,073	215,783	228,431	(12,648)	215,783	195,264	(10,812)	184,452	16,051	6,972,022	5,959,714	
2020	7,254,444	225,135	229,245	(4,110)	225,135	188,423	(3,378)	185,045	4,045	7,250,399	5,959,299	
2021	7,540,348	234,290	241,641	(7,351)	234,290	190,972	(5,810)	185,162	97	7,540,251	5,959,170	
2022	7,834,315	248,080	259,875	(11,795)	248,080	197,484	(8,963)	188,521	(7,250)	7,841,565	5,958,945	
2023	8,135,422	256,652	280,759	(24,107)	256,652	205,148	(17,615)	187,533	(19,335)	8,154,757	5,958,601	
2024	8,433,562	268,587	297,424	(28,837)	268,587	208,966	(20,260)	188,706	(44,215)	8,477,777	5,956,374	
2025	8,740,913	283,811	328,903	(45,092)	283,811	222,195	(30,463)	191,732	(74,821)	8,815,734	5,955,594	
2026	9,043,653	296,625	358,878	(62,253)	296,625	233,120	(40,438)	192,682	(122,906)	9,166,559	5,954,422	
2027	9,338,164	309,772	376,346	(66,574)	309,772	235,065	(41,582)	193,483	(190,075)	9,528,239	5,951,310	
2028	9,642,455	324,655	413,635	(88,980)	324,655	248,418	(53,439)	194,979	(264,252)	9,906,707	5,949,712	
2029	9,935,614	339,208	437,420	(98,212)	339,208	252,599	(56,715)	195,884	(363,802)	10,299,416	5,947,656	
2030	10,230,897	353,357	452,887	(99,530)	353,357	251,472	(55,265)	196,207	(476,566)	10,707,463	5,945,474	
2031	10,536,622	368,116	462,089	(93,973)	368,116	246,713	(50,173)	196,540	(595,159)	11,131,781	5,943,349	
2032	10,844,420	382,340	468,028	(85,688)	382,340	240,273	(43,990)	196,283	(712,938)	11,557,358	5,933,238	
2033	11,189,081	400,353	488,424	(88,071)	400,353	241,100	(43,474)	197,626	(827,144)	12,016,225	5,931,547	
2034	11,515,367	415,458	446,354	(30,896)	415,458	211,859	(14,665)	197,194	(948,301)	12,463,668	5,915,786	
2035	11,927,661	432,827	447,720	(14,893)	432,827	204,334	(6,797)	197,537	(1,017,129)	12,944,790	5,907,833	
2036	12,366,037	450,192	471,338	(21,146)	450,192	206,839	(9,280)	197,559	(1,072,707)	13,438,744	5,897,372	
2037	12,837,015	469,369	483,779	(14,410)	469,369	204,133	(6,080)	198,053	(1,136,761)	13,973,776	5,896,310	
2038	13,335,508	489,136	517,888	(28,752)	489,136	210,121	(11,665)	198,456	(1,196,641)	14,532,149	5,896,076	
2039	13,889,744	509,289	553,415	(44,126)	509,289	215,899	(17,215)	198,684	(1,273,259)	15,163,003	5,915,413	
2040	14,395,607	531,305	577,589	(46,284)	531,305	216,663	(17,362)	199,301	(1,368,315)	15,763,922	5,913,312	
2041	14,923,294	557,140	620,838	(63,698)	557,140	223,930	(22,975)	200,955	(1,469,332)	16,392,626	5,912,644	
2042	15,458,083	582,119	664,363	(82,244)	582,119	230,412	(28,524)	201,888	(1,591,803)	17,049,886	5,913,183	
2043	15,990,872	609,201	685,395	(76,194)	609,201	228,564	(25,409)	203,155	(1,737,719)	17,728,591	5,912,086	
2044	16,551,265	637,197	704,965	(67,768)	637,197	226,048	(21,730)	204,318	(1,883,422)	18,434,687	5,911,108	
2045	17,179,850	667,242	721,921	(54,679)	667,242	222,582	(16,859)	205,723	(2,026,527)	19,206,377	5,921,685	

EXHIBIT D

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - pay-as-you-go

Fiscal Year	Number of Retirees, Spouses & Surviving Spouses	Total Actuarial Accrued Liability ("AAL")	Present Value at 4.00% of Total Actuarial Accrued Liability ("AAL")	Employer Share of Premiums / Claims including "implicit cost"	Present Value at 4.00% of Employer Share of Premiums / Claims including "implicit cost"
2015	42	5,959,170	5,959,170	176,091	176,091
2016	42	6,205,988	5,967,296	189,074	181,802
2017	42	6,456,754	5,969,632	197,719	182,802
2018	43	6,716,749	5,971,165	204,781	182,050
2019	43	6,988,073	5,973,434	228,431	195,264
2020	44	7,254,444	5,962,624	229,245	188,423
2021	44	7,540,348	5,959,247	241,641	190,972
2022	45	7,834,315	5,953,436	259,875	197,484
2023	46	8,135,422	5,944,473	280,759	205,148
2024	47	8,433,562	5,925,309	297,424	208,966
2025	48	8,740,913	5,905,048	328,903	222,195
2026	50	9,043,653	5,874,585	358,878	233,120
2027	51	9,338,164	5,832,590	376,346	235,065
2028	53	9,642,455	5,791,009	413,635	248,418
2029	53	9,935,614	5,737,570	437,420	252,599
2030	54	10,230,897	5,680,854	452,887	251,472
2031	54	10,536,622	5,625,589	462,089	246,713
2032	55	10,844,420	5,567,235	468,028	240,273
2033	55	11,189,081	5,523,245	488,424	241,100
2034	54	11,515,367	5,465,682	446,354	211,859
2035	54	11,927,661	5,443,629	447,720	204,334
2036	54	12,366,037	5,426,633	471,338	206,839
2037	53	12,837,015	5,416,648	483,779	204,133
2038	53	13,335,508	5,410,567	517,888	210,121
2039	52	13,889,744	5,418,687	553,415	215,899
2040	52	14,395,607	5,400,034	577,589	216,663
2041	52	14,923,294	5,382,671	620,838	223,930
2042	52	15,458,083	5,361,119	664,363	230,412
2043	51	15,990,872	5,332,596	685,395	228,564
2044	51	16,551,265	5,307,187	704,965	226,048
2045	51	17,179,850	5,296,868	721,921	222,582
2046	51	17,810,178	5,280,010	746,575	221,330
2047	50	18,472,070	5,265,610	761,408	217,045
2048	50	19,193,561	5,260,843	774,350	212,245
2049	50	19,977,157	5,265,021	808,417	213,060
2050	49	20,768,354	5,263,022	846,846	214,604
2051	49	21,591,071	5,261,069	849,679	207,040
2052	49	22,484,226	5,267,983	880,469	206,291
2053	48	23,425,303	5,277,379	918,447	206,913
2054	47	24,410,155	5,287,743	930,459	201,557

EXHIBIT E

GLOSSARY

AAI – Actuarial Accrued Liability. That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

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.

Actuarial Value of Assets – The value of cash, investments, other assets and property belonging to an OPEB trust, pension fund or similar entity, as used by the actuary for the purpose of actuarial valuation. Some funds may be restricted for other purposes, and “smoothing” of investment gains and losses often make the actuarial value of assets different from the market value of assets.

Annual Required Contribution – Normal Cost plus an amortization of the funding shortfall over a period of no more than 30 years.

Cash Basis Accounting - A system of accounting in which revenues are recorded when actually received and outlays are recorded when payment is made.

Discount Rate – The interest rate used to calculate present value of a series of future cash flows. Under GASB 45, the rate should be “long term expected yield on the investments that are expected to be used to pay benefits as they come due. These would be plan investments for a funded plan, the employer’s investments for a pay as you go plan [e.g. short term county investment pool], or a weighted average of expected plan and employer investments for a plan that is partially funded”.

FASB – Financial Accounting Standards Board. “Since 1973, the Financial Accounting Standards Board (FASB) has been the designated organization in the private sector for establishing standards of financial accounting and reporting”.

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.”

EXHIBIT E**GLOSSARY***(continued)*

GFOA – Government Finance Officers Association. “GFOA is the professional association of state/provincial and local finance officers in the United States and Canada, and has served the public finance profession since 1906. Approximately 16,000 GFOA members are dedicated to the sound management of government financial resources.”

Implicit Subsidy – “The difference between a premium rate charged to retirees for a particular benefit and the estimated rate that would have been applicable to those retirees if that benefit was acquired for them as a separate group.”

Irrevocable Contribution – “Irrevocably transferred assets to a qualifying trust, or equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator. The preceding criteria preclude counting as [irrevocable] contributions (a) designations of net assets of a governmental or proprietary fund to be used for OPEB or (b) internal transfers of assets to a separate governmental or proprietary fund for the same purpose. Rather, such actions should be regarded as earmarking of employer assets.”

Level Dollar Amortization – Funding a shortfall in OPEB assets with equal dollar payments over a designated number of years (no more than 30 years). The present value of the level payments equals the present value of unfunded liabilities, the UAAL.

Level Percent of Payroll Amortization – Funding a shortfall in OPEB assets as a level percent of payroll over a designated number of years (no more than 30 years). The present value of the payments equals the present value of unfunded liabilities, the UAAL. Level percent of payroll typically has lower payments in the early years than level dollar amortization. When using level payroll amortization, employee count is assumed to be constant, and the payroll differences arise from overall wage trends.

EXHIBIT E**GLOSSARY***(continued)*

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

NOA - Net OPEB Asset. The amount recognized by an employer for contributions to an OPEB plan greater than OPEB expenses.

NOO - Net OPEB Obligation. The cumulative difference since the effective date of GASB Statement number 45 between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

OPEB - Other Post Employment Benefits

OPEB Trust - An entity other than a pension or retirement system which manages OPEB assets. In many respects it is similar to a pension fund for OPEB. For reasons detailed in GASB 45, contributions to an OPEB trust should be irrevocable in order to obtain the most favorable accounting treatment.

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.

POB - Pension Obligation Bond. Generally yielding taxable interest, POBs are issued to help fund a previously unfunded or underfunded pension liability.

UAAL - Unfunded Accrued Actuarial Liability. Actuarial Accrued Liability minus the Actuarial Value of Assets.