

**Town of Sherborn Other
Postemployment Benefits Plan**

GASB 45 Actuarial Valuation

as of

June 30, 2016

For the fiscal years ending

June 30, 2016

June 30, 2017

Delivered December 2015

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December 9, 2015

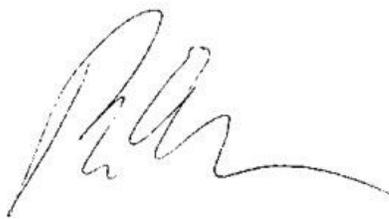
ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Sherborn other postemployment benefit programs as of June 30, 2016 for the fiscal year ending June 30, 2016 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 Sherborn
Assuming Pay-as-you-go funding - 4.00% discount rate
Comparison of Plan Liabilities to Prior Valuation**

	<u>June 30, 2016</u>	<u>June 30, 2013</u>
I. Present Value of Future Benefits		
A. Actives	10,016,623	11,823,912
B. Retirees/Disabled	<u>4,688,164</u>	<u>3,720,682</u>
C. Total	14,704,787	15,544,594
II. Present Value of Future Normal Cost	4,812,173	5,931,584
III. Actuarial Accrued Liability (Entry Age Normal)		
A. Actives	5,204,450	5,892,328
B. Retirees/Disabled	<u>4,688,164</u>	<u>3,720,682</u>
C. Total	9,892,614	9,613,010
IV. Plan Assets	627,014	0
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	9,265,600	9,613,010
VI. Funded Ratio [IV. / III.]	6.34%	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	2,485,495	1,347,897
X. Number of Eligible Participants		
A. Actives	110	115
B. Retirees/Disabled	<u>89</u>	<u>74</u>
C. Total	199	189
For Fiscal Year Ending June 30, 2016	<u>June 30, 2016</u>	<u>June 30, 2013</u>
XI. Normal Cost	365,590	404,376
XII. Amortization of UAAL - 30 year increase 4.50% per yr	403,323	353,431
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	768,913	757,807
XIV. Interest on Net OPEB Obligation (Asset)	99,420	53,916
XV. Adjustment to Annual Required Contribution	(138,209)	(74,951)
XVI. Amortization of Actuarial (Gains) / Losses	(53,865)	(30,621)
XVII. Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	676,259	706,151
XVIII. Employer Share of Costs	372,166	334,325
XIX. Employer Payments (Withdrawals) to/from OPEB Trust	100,000	0
XX. Total Employer Contribution [XVIII. + XIX.]	472,166	334,325
XXI. Percentage of Annual OPEB Expense Contributed	69.8%	47.3%
XXII. Net OPEB Obligation (Asset) at Beginning of Year [IX.]	2,485,495	1,347,897
XXIII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVII. - XX.]	204,093	371,826
XXIV. Net OPEB Obligation (Asset) at End of Year [XXII. + XXIII.]	2,689,588	1,719,723
XXV. Discount Rate	4.00%	4.00%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Sherborn 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	10,016,623	5,328,748
B. Retirees/Disabled	<u>4,688,164</u>	<u>3,573,548</u>
C. Total	14,704,787	8,902,296
II. Present Value of Future Normal Cost	4,812,173	1,927,206
III. Actuarial Accrued Liability (Entry Age Normal)		
A. Actives	5,204,450	3,401,542
B. Retirees/Disabled	<u>4,688,164</u>	<u>3,573,548</u>
C. Total	9,892,614	6,975,090
IV. Plan Assets	627,014	627,014
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	9,265,600	6,348,076
VI. Funded Ratio [IV. / III.]	6.34%	8.99%
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	2,485,495	2,485,495
X. Number of Eligible Participants		
A. Actives	110	110
B. Retirees/Disabled	<u>89</u>	<u>89</u>
C. Total	199	199
For Fiscal Year Ending June 30, 2016		
XI. Normal Cost	365,590	193,345
XII. Amortization of UAAL - 30 year increase 4.50% per yr	403,323	528,671
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	768,913	722,016
XIV. Interest on Net OPEB Obligation (Asset)	99,420	173,985
XV. Adjustment to Annual Required Contribution	(138,209)	(187,193)
XVI. Amortization of Actuarial (Gains) / Losses	(53,865)	(292,687)
XVII. Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	676,259	416,121
XVIII. Employer Share of Costs	372,166	372,166
XIX. Employer Payments (Withdrawals) to/from OPEB Trust	100,000	184,197
XX. Total Employer Contribution [XVIII. + XIX.]	472,166	556,363
XXI. Percentage of Annual OPEB Expense Contributed	69.8%	133.7%
XXII. Net OPEB Obligation (Asset) at Beginning of Year [IX.]	2,485,495	2,485,495
XXIII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVII. - XX.]	204,093	(140,242)
XXIV. Net OPEB Obligation (Asset) at End of Year [XXII. + XXIII.]	2,689,588	2,345,253
XXV. Discount Rate	4.00%	7.00%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Sherborn
Assuming pay-as-you-go - 4.00% discount rate
Plan Liabilities as of June 30, 2016**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	9,385,458	0	59,042	572,123	10,016,623
B. Retirees/Disabled	<u>4,611,581</u>	<u>0</u>	<u>47,789</u>	<u>28,794</u>	<u>4,688,164</u>
C. Total	13,997,039	0	106,831	600,917	14,704,787
II. Present Value of Future Normal Cost	4,402,644	0	17,783	391,746	4,812,173
III. Actuarial Accrued Liability (Entry Age Normal)					
A. Actives	4,982,814	0	41,259	180,377	5,204,450
B. Retirees/Disabled	<u>4,611,581</u>	<u>0</u>	<u>47,789</u>	<u>28,794</u>	<u>4,688,164</u>
C. Total	9,594,395	0	89,048	209,171	9,892,614
IV. Plan Assets	604,015	0	1,616	21,383	627,014
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	8,990,380	0	87,432	187,788	9,265,600
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	2,410,568	0	22,373	52,554	2,485,495
IX. Number of Eligible Participants					
A. Actives	110	0	110	110	
B. Retirees/Disabled	<u>89</u>	<u>0</u>	<u>31</u>	<u>89</u>	
C. Total	199	0	141	199	
For Fiscal Year Ending June 30, 2016					
X. Normal Cost	342,578	0	1,890	21,122	365,590
XI. Amortization of UAAL - 30 year increase 4.50% per yr	391,165	0	3,630	8,528	403,323
XII. Annual Required Contribution ('ARC') [X. + XI.]	733,743	0	5,520	29,650	768,913
XIII. Interest on Net OPEB Obligation (Asset)	96,423	0	895	2,102	99,420
XIV. Adjustment to Annual Required Contribution	(134,042)	0	(1,245)	(2,922)	(138,209)
XV. Amortization of Actuarial (Gains) / Losses	(52,274)	0	(488)	(1,103)	(53,865)
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	643,850	0	4,682	27,727	676,259
XVII. Employer Share of Costs	369,043	0	3,123	0	372,166
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	96,986	0	900	2,114	100,000
XIX. Total Employer Contribution [XVII. + XVIII.]	466,029	0	4,023	2,114	472,166
XX. Percentage of Annual OPEB Expense Contributed	72.4%	0.0%	85.9%	7.6%	69.8%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	2,410,568	0	22,373	52,554	2,485,495
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	177,821	0	659	25,613	204,093
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	2,588,389	0	23,032	78,167	2,689,588

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sherborn
Plan Liabilities as of June 30, 2016
Assuming maintain pay-as-you-go funding method

	Administration Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Library Employees and Retirees	Highway Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	1,133,119	4,893,003	2,899,172	279,443	811,886	10,016,623
B. Retirees/Disabled	<u>500,180</u>	<u>2,031,144</u>	<u>1,833,977</u>	<u>146,509</u>	<u>176,354</u>	<u>4,688,164</u>
C. Total	1,633,299	6,924,147	4,733,149	425,952	988,240	14,704,787
II. Present Value of Future Normal Cost	471,552	2,052,517	1,958,899	36,176	293,029	4,812,173
III. Actuarial Accrued Liability (Entry Age Normal)						
A. Actives	661,567	2,840,486	940,273	243,267	518,857	5,204,450
B. Retirees/Disabled	<u>500,180</u>	<u>2,031,144</u>	<u>1,833,977</u>	<u>146,509</u>	<u>176,354</u>	<u>4,688,164</u>
C. Total	1,161,747	4,871,630	2,774,250	389,776	695,211	9,892,614
IV. Plan Assets	74,048	306,652	178,001	24,889	43,424	627,014
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	1,087,699	4,564,978	2,596,249	364,887	651,787	9,265,600
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	290,676	1,217,327	709,480	97,014	170,998	2,485,495
IX. Number of Eligible Participants						
A. Actives	18	64	15	4	9	110
B. Retirees/Disabled	<u>17</u>	<u>50</u>	<u>12</u>	<u>4</u>	<u>6</u>	<u>89</u>
C. Total	35	114	27	8	15	199
For Fiscal Year Ending June 30, 2016						
X. Normal Cost	47,954	185,432	98,560	6,157	27,487	365,590
XI. Amortization of UAAL - 30 year increase 4.50% per yr	47,142	197,531	115,178	15,733	27,739	403,323
XII. Annual Required Contribution (ARC) [X. + XI.]	95,096	382,963	213,738	21,890	55,226	768,913
XIII. Interest on Net OPEB Obligation (Asset)	11,627	48,694	28,379	3,880	6,840	99,420
XIV. Adjustment to Annual Required Contribution	(16,164)	(67,691)	(39,451)	(5,395)	(9,508)	(138,209)
XV. Amortization of Actuarial (Gains) / Losses	(6,299)	(26,382)	(15,376)	(2,102)	(3,706)	(53,865)
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	84,260	337,584	187,290	18,273	48,852	676,259
XVII. Employer Share of Costs	50,492	183,409	95,042	21,123	22,100	372,166
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	23,488	98,490	56,087	7,880	14,055	200,000
XIX. Total Employer Contribution [XVII. + XVIII.]	73,980	281,899	151,129	29,003	36,155	472,166
XX. Percentage of Annual OPEB Expense Contributed	59.9%	54.3%	50.7%	115.6%	45.2%	55.0%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	290,676	1,217,327	709,480	97,014	170,998	2,485,495
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	10,280	55,685	36,161	(10,730)	12,697	104,093
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	300,956	1,273,012	745,641	86,284	183,695	2,589,588

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Sherborn
Detail of Plan Liabilities by Group and Dependency Status
Assuming pay-as-you-go funding - 4.00% discount rate
Plan Liabilities as of June 30, 2016

	<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	1,836,976	840,798	73,633
B. Spouses	<u>1,364,472</u>	<u>605,094</u>	<u>53,268</u>
C. Total	3,201,448	1,445,892	126,901
Age 65 and Over			
A. Participants	4,111,041	2,229,119	129,098
B. Spouses	<u>2,704,134</u>	<u>1,529,439</u>	<u>109,591</u>
C. Total	6,815,175	3,758,558	238,689
Actives Total			
A. Participants	5,948,017	3,069,917	202,731
B. Spouses	<u>4,068,606</u>	<u>2,134,533</u>	<u>162,859</u>
C. Total	10,016,623	5,204,450	365,590
Retirees/Disabled			
Under Age 65			
A. Participants	517,364	517,364	0
B. Spouses	<u>463,417</u>	<u>463,417</u>	<u>0</u>
C. Total	980,781	980,781	0
Age 65 and Over			
A. Participants	2,851,023	2,851,023	<u>0</u>
B. Spouses	<u>856,360</u>	<u>856,360</u>	<u>0</u>
C. Total	3,707,383	3,707,383	0
Retirees/Disabled Total			
A. Participants	3,368,387	3,368,387	0
B. Spouses	<u>1,319,777</u>	<u>1,319,777</u>	<u>0</u>
C. Total	4,688,164	4,688,164	0
Total Population			
A. Participants	9,316,404	6,438,304	202,731
B. Spouses	<u>5,388,383</u>	<u>3,454,310</u>	<u>162,859</u>
C. Total	14,704,787	9,892,614	365,590

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sherborn
Assuming Funding over 30 years at 7.00% discount rate
Plan Liabilities as of June 30, 2016

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	5,053,288	0	28,103	247,357	5,328,748
B. Retirees/Disabled	<u>3,518,577</u>	<u>0</u>	<u>36,197</u>	<u>18,774</u>	<u>3,573,548</u>
C. Total	8,571,865	0	64,300	266,131	8,902,296
II. Present Value of Future Normal Cost	1,779,549	0	5,913	141,744	1,927,206
III. Actuarial Accrued Liability (Entry Age Normal)					
A. Actives	3,273,739	0	22,190	105,613	3,401,542
B. Retirees/Disabled	<u>3,518,577</u>	<u>0</u>	<u>36,197</u>	<u>18,774</u>	<u>3,573,548</u>
C. Total	6,792,316	0	58,387	124,387	6,975,090
IV. Plan Assets	610,583	0	5,249	11,182	627,014
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	6,181,733	0	53,138	113,205	6,348,076
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	2,410,568	0	22,373	52,554	2,485,495
IX. Number of Eligible Participants					
A. Actives	110	0	110	110	
B. Retirees/Disabled	<u>89</u>	<u>0</u>	<u>31</u>	<u>89</u>	
C. Total	199	0	141	199	
For Fiscal Year Ending June 30, 2016					
X. Normal Cost	180,756	0	858	11,731	193,345
XI. Amortization of UAAL - 30 year increase 4.50% per yr	514,200	0	4,623	9,848	528,671
XII. Annual Required Contribution ('ARC') [X. + XI.]	694,956	0	5,481	21,579	722,016
XIII. Interest on Net OPEB Obligation (Asset)	168,740	0	1,566	3,679	173,985
XIV. Adjustment to Annual Required Contribution	(181,550)	0	(1,685)	(3,958)	(187,193)
XV. Amortization of Actuarial (Gains) / Losses	(285,018)	0	(2,450)	(5,219)	(292,687)
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	397,128	0	2,912	16,081	416,121
XVII. Employer Share of Costs	369,043	0	3,123	0	372,166
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	168,327	0	(211)	16,081	184,197
XIX. Total Employer Contribution [XVII. + XVIII.]	537,370	0	2,912	16,081	556,363
XX. Percentage of Annual OPEB Expense Contributed	135.3%	0.0%	100.0%	100.0%	133.7%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	2,410,568	0	22,373	52,554	2,485,495
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	(140,242)	0	0	0	(140,242)
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	2,270,326	0	22,373	52,554	2,345,253

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sherborn
Plan Liabilities as of June 30, 2016
Assuming Funding over 30 years at 7.00% discount rate

	Administration Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Library Employees and Retirees	Highway Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	602,808	2,603,031	1,542,332	148,661	431,916	5,328,748
B. Retirees/Disabled	<u>381,262</u>	<u>1,548,237</u>	<u>1,397,947</u>	<u>111,676</u>	<u>134,426</u>	<u>3,573,548</u>
C. Total	984,070	4,151,268	2,940,279	260,337	566,342	8,902,296
II. Present Value of Future Normal Cost	188,849	822,004	784,511	14,488	117,354	1,927,206
III. Actuarial Accrued Liability (Entry Age Normal)						
A. Actives	432,390	1,856,494	614,547	158,995	339,116	3,401,542
B. Retirees/Disabled	<u>381,262</u>	<u>1,548,237</u>	<u>1,397,947</u>	<u>111,676</u>	<u>134,426</u>	<u>3,573,548</u>
C. Total	813,652	3,404,731	2,012,494	270,671	473,542	6,975,090
IV. Plan Assets	74,048	306,652	178,001	24,889	43,424	627,014
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	739,604	3,098,079	1,834,493	245,782	430,118	6,348,076
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	290,676	1,217,327	709,480	97,014	170,998	2,485,495
IX. Number of Eligible Participants						
A. Actives	18	64	15	4	9	110
B. Retirees/Disabled	<u>17</u>	<u>50</u>	<u>12</u>	<u>4</u>	<u>6</u>	<u>89</u>
C. Total	35	114	27	8	15	199
For Fiscal Year Ending June 30, 2016						
X. Normal Cost	25,361	98,067	52,124	3,256	14,537	193,345
XI. Amortization of UAAL - 30 year increase 4.50% per yr	61,793	258,921	150,974	20,623	36,360	528,671
XII. Annual Required Contribution ("ARC") [X. + XI.]	87,154	356,988	203,098	23,879	50,897	722,016
XIII. Interest on Net OPEB Obligation (Asset)	20,347	85,215	49,663	6,790	11,970	173,985
XIV. Adjustment to Annual Required Contribution	(21,893)	(91,682)	(53,433)	(7,307)	(12,878)	(187,193)
XV. Amortization of Actuarial (Gains) / Losses	(34,227)	(143,352)	(83,549)	(11,422)	(20,137)	(292,687)
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	51,381	207,169	115,779	11,940	29,852	416,121
XVII. Employer Share of Costs	50,492	183,409	95,042	21,123	22,100	372,166
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	21,486	89,912	53,146	7,148	12,505	184,197
XIX. Total Employer Contribution [XVII. + XVIII.]	71,978	273,321	148,188	28,271	34,605	556,363
XX. Percentage of Annual OPEB Expense Contributed	140.1%	131.9%	128.0%	236.8%	115.9%	133.7%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	290,676	1,217,327	709,480	97,014	170,998	2,485,495
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	(20,597)	(66,152)	(32,409)	(16,331)	(4,753)	(140,242)
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	270,079	1,151,175	677,071	80,683	166,245	2,345,253

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, 2016, the Plan saw an experience gain of \$1,730,639 or 15.74%. Plan experience was more favorable than expected. This was mainly due to premiums for Medicare integrated plans decreasing vs. an expected 11% increase. This was somewhat offset by the introduction of a new Actuarial Cost Method in preparation for GASB 75 (increasing disclosed liabilities by \$400K) and the ACA excise tax as well as premiums for non-Medicare integrated plans increasing by 22% vs. and expected 11% increase. 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**

	June 30, 2016	June 30, 2014
Actuarial Accrued Liability	\$9,892,614	\$9,613,010
Plan Assets	\$627,014	\$0
Unfunded Actuarial Accrued Liability	\$9,265,600	\$9,613,010
Funded %	6.34%	0.00%
Net OPEB Obligation	\$2,485,495	\$1,347,897

4. **Income Statement Items**

	June 30, 2016	June 30, 2014
Normal Cost	\$365,590	\$404,376
Amortization of UAAL	\$403,323	\$353,431
Interest on Net OPEB Obligation	\$99,420	\$53,916
Adjustment to Annual Required Contribution	\$(138,209)	\$(74,951)
Amortization of Actuarial (Gains)/Losses	\$(53,865)	\$(30,621)
Annual OPEB Expense	\$676,259	\$706,151
Employer Share of Costs Employer Contributions/(Withdrawals) to/from OPEB Trust	\$372,166	\$334,325
Total Employer Contribution	\$100,000	\$0
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>	Retirees will pay 21%-50% of premiums in retirement for Medical Insurance depending on the plan elected. Retirees shall pay 50% of premiums for Life Insurance. The town also pays for the Medicare penalty for 3 retirees.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Blue Cross of Massachusetts, Harvard Pilgrim Health Group, Tufts Health Plan and Fallon Healthcare as well as Group Term Life Insurance.
<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 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.

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			
	Single	Two-Person	Family	Total
Harvard Pilgrim EPO	15		33	48
Tufts EPO	11		13	24
Network Blue HMO	4		10	14
Fallon Direct	3		4	7
Fallon Select				0
Fallon Senior				0
Managed Blue for Seniors				0
Medex	25			25
Tufts Medicare Plus	5			5
Tufts Medicare Preferred	7			7
Harvard Pilgrim Medicare Enhanced	13	4		17
Total	83	4	60	147

	Per Contract Costs (monthly) - FY 2016		
	Single	Two-Person	Family
Harvard Pilgrim EPO	736.00	0.00	1,918.00
Tufts EPO	797.00	0.00	2,088.00
Network Blue HMO	843.00	0.00	2,261.00
Fallon Direct	570.00	0.00	1,531.00
Fallon Select	611.00		1,647.00
Fallon Senior	299.00	598.00	
Managed Blue for Seniors	296.00	592.00	
Medex	340.00	680.00	
Tufts Medicare Plus	330.00	660.00	
Tufts Medicare Preferred	262.00	524.00	
Harvard Pilgrim Medicare Enhanced	328.00	656.00	

Gross Expected FY 2016 Incurred Premiums	1,955,196
Adjustment to reflect children's claims	(341,448)
Total Expected FY 2016 Incurred Premiums (adults only)	1,613,748

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

	<u>Employer</u> <u>Primary</u>	<u>Medicare</u> <u>Primary</u>
Age 65	11,747	3,905
Average Age	10,744	3,905

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

1,613,748 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	0	1.312	0.549	7,207	3,016	0
25 to 29	3	2	1.312	0.591	7,207	3,246	28,113
30 to 34	4	7	1.312	0.712	7,207	3,911	56,205
35 to 39	5	1	1.312	0.850	7,207	4,669	40,704
40 to 44	9	6	1.312	1.000	7,207	5,493	97,821
45 to 49	7	11	1.456	1.193	7,998	6,553	128,069
50 to 54	8	4	1.599	1.441	8,783	7,915	101,924
55 to 59	9	8	1.740	1.753	9,558	9,629	163,054
60 to 64	13	11	1.968	2.102	10,810	11,546	267,536
65 to 69	4	8	2.168	2.316	11,909	12,722	149,412
70 & Over	0	2	2.396	2.557	13,161	14,046	28,092
Total	62	60					1,060,930

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	0	0	1.312	1.000	7,207	5,493	0
45 to 49	1	0	1.456	1.193	7,998	6,553	7,998
50 to 54	2	2	1.599	1.441	8,783	7,915	33,396
55 to 59	4	2	1.740	1.753	9,558	9,629	57,490
60 to 64	7	8	1.968	2.102	10,810	11,546	168,038
65 to 69	1	1	2.168	2.316	11,909	12,722	24,631
70 to 74	0	0	2.396	2.557	13,161	14,046	0
75 to 79	1	0	2.593	2.769	14,243	15,210	14,243
80 to 84	0	0	2.724	2.910	14,963	15,985	0
85 to 89	0	0	2.864	3.059	15,732	16,803	0
90 & Over	1	0	3.010	3.215	16,534	17,660	16,534
Total	17	13					322,330

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	12	11	2.168	2.316	3,905	3,905	89,815
70 to 74	5	9	2.396	2.557	3,905	3,905	54,670
75 to 79	8	5	2.593	2.769	3,905	3,905	50,765
80 to 84	4	2	2.724	2.910	3,905	3,905	23,430
85 to 89	2	0	2.864	3.059	3,905	3,905	7,810
90 & Over	1	0	3.010	3.215	3,905	3,905	3,905
Total	32	27					230,395
Grand Totals	111	100					1,613,655

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 2016		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Dental Plan	N/A		N/A
	FY 2016 Expected Per Person Rate		N/A

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2016)

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: Comprehensive Medical Insurance offered through Blue Cross of Massachusetts, Harvard Pilgrim Health Group, Tufts Health Plan and Fallon Healthcare
- b. Administrator: Town of Sherborn
- 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: For non-Medicare integrated plans grandfathered school retirees shall pay 21%-28% of premiums depending on coverage level, the rest shall pay 30%, all retirees shall pay 50% of premiums Medicare integrated plans.

2. A DESCRIPTION OF THE DENTAL INSURANCE PROGRAM:

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

3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

- a. Plan Type: Group Term Life Insurance - \$5,000
- b. Administrator: Town of Sherborn
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 50% of premiums in retirement.

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2016)

(continued)

4. RETIREE MEDICAL AND LIFE INSURANCE CONTRIBUTIONS:

Group	Individual	Family
Medical	For non-Medicare integrated plans retirees shall pay 21% of premiums, except for school employees hired after 9/1/96 who shall pay 30% of premiums. All retirees shall pay 50% of premiums Medicare integrated plans.	For non-Medicare integrated plans retirees shall pay 28% of premiums, except for school employees hired after 9/1/96 who shall pay 30% of premiums. All retirees shall pay 50% of premiums Medicare integrated plans.
Dental	N/A	N/A
Life	Retirees shall pay 50% of premiums for Life Insurance	N/A

5. FUNDING POLICY

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town expects to contribute \$200,000 beyond the pay-as-you-go. For the 2016 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$372,166. The Town is also projected to make a contribution to an OPEB Trust of \$100,000 for the 2016 fiscal year for a total contribution of \$472,166 .

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2016)

(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	\$768,913
Interest on net OPEB Obligation (Asset)	\$99,420
Adjustment to annual required contribution	(\$138,209)
Amortization of Actuarial (Gains) / Losses	(\$53,865)
Annual OPEB expense	\$676,259
Contributions made to pay benefits	\$372,166
Contributions made to OPEB Trust	\$100,000
Increase (Decrease) in net OPEB Obligation (Asset)	\$204,093
Net OPEB Obligation (Asset) – beginning of year	\$2,485,495
Net OPEB Obligation (Asset) – end of year	\$2,689,588

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2016)

(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 2016 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)
06/30/2018 (est.)	\$797,630	\$635,909	79.7%	\$161,721	\$2,989,108
06/30/2017 (est.)	\$744,194	\$606,395	81.5%	\$137,799	\$2,827,387
06/30/2016	\$676,259	\$472,166	69.8%	\$204,093	\$2,689,588
06/30/2015	\$787,529	\$406,185	51.6%	\$381,344	\$2,485,495
06/30/2014	\$745,083	\$360,655	48.4%	\$384,428	\$2,104,151
06/30/2013	\$706,151	\$334,325	47.3%	\$371,826	\$1,719,723

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
06/30/2018 (est.)	\$1,011,654	\$10,483,723	\$9,472,069	9.6%	N/A	N/A
06/30/2017 (est.)	\$754,075	\$10,149,087	\$9,395,012	7.4%	N/A	N/A
06/30/2016	\$627,014	\$9,892,614	\$9,265,600	6.3%	N/A	N/A
06/30/2015	\$0	\$10,264,656	\$10,264,656	0.0%	N/A	N/A
06/30/2014	\$0	\$9,896,340	\$9,896,340	0.0%	N/A	N/A
06/30/2013	\$0	\$9,613,010	\$9,613,010	0.0%	N/A	N/A

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2016)
(continued)

Fiscal Year Ending June 30, 2016						
	Administration Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Library Employees and Retirees	Highway Employees and Retirees	Total
OPEB Obligation (Asset) at beginning of year	290,676	1,217,327	709,480	97,014	170,998	2,485,495
Annual Required Contribution	95,096	382,963	213,738	21,890	55,226	768,913
Interest on Net OPEB Obligation	11,627	48,694	28,379	3,880	6,840	99,420
Adjustment to the ARC	(16,164)	(67,691)	(39,451)	(5,395)	(9,508)	(138,209)
Amortization of Actuarial (Gains)/Losses	(6,299)	(26,382)	(15,376)	(2,102)	(3,706)	(53,865)
Annual OPEB Cost	84,260	337,584	187,290	18,273	48,852	676,259
Expected Employer Contribution	50,492	183,409	95,042	21,123	22,100	372,166
Contribution (Withdrawal) to/from Trust Fund over 30 Years	23,488	98,490	56,087	7,880	14,055	200,000
Total Expected Employer Payments	73,980	281,899	151,129	29,003	36,155	572,166
Increase (Decrease) in OPEB Obligation (Asset)	10,280	55,685	36,161	(10,730)	12,697	104,093
OPEB Obligation (Asset) at end of year	300,956	1,273,012	745,641	86,284	183,695	2,589,588
AAL as of June 30, 2016	1,161,747	4,871,630	2,774,250	389,776	695,211	9,892,614
Plan Assets as of June 30, 2016	74,048	306,652	178,001	24,889	43,424	627,014
Unfunded Actuarial Liability as of June 30, 2016	1,087,699	4,564,978	2,596,249	364,887	651,787	9,265,600

Fiscal Year Ending June 30, 2017						
	Administration Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Library Employees and Retirees	Highway Employees and Retirees	Total
OPEB Obligation (Asset) at beginning of year	300,956	1,273,012	745,641	86,284	183,695	2,589,588
Annual Required Contribution	102,488	412,733	230,353	23,592	59,519	828,685
Interest on Net OPEB Obligation	12,581	52,692	30,709	4,199	7,402	107,583
Adjustment to the ARC	(17,491)	(73,249)	(42,690)	(5,838)	(10,289)	(149,557)
Amortization of Actuarial (Gains)/Losses	(4,855)	(20,679)	(12,267)	(1,844)	(2,872)	(42,517)
Annual OPEB Cost	92,723	371,497	206,105	20,109	53,760	744,194
Expected Employer Contribution	52,216	188,947	97,633	21,952	22,647	383,395
Contribution (Withdrawal) to/from Trust Fund over 30 Years	26,190	109,816	62,537	8,786	15,671	223,000
Total Expected Employer Payments	78,406	298,763	160,170	30,738	38,318	606,395
Increase (Decrease) in OPEB Obligation (Asset)	14,317	72,734	45,935	(10,629)	15,442	137,799
OPEB Obligation (Asset) at end of year	315,273	1,345,746	791,576	75,655	199,137	2,727,387
AAL as of June 30, 2017	1,191,867	4,997,930	2,846,174	399,881	713,235	10,149,087
Plan Assets as of June 30, 2017	(1,018)	419,359	242,319	33,921	59,494	754,075
Unfunded Actuarial Liability as of June 30, 2017	1,192,885	4,578,571	2,603,855	365,960	653,741	9,395,012

Fiscal Year Ending June 30, 2018						
	Administration Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Library Employees and Retirees	Highway Employees and Retirees	Total
OPEB Obligation (Asset) at beginning of year	315,273	1,345,746	791,576	75,655	199,137	2,727,387
Annual Required Contribution	108,415	436,602	243,675	24,956	62,961	876,609
Interest on Net OPEB Obligation	13,226	55,392	32,282	4,414	7,781	113,095
Adjustment to the ARC	(18,388)	(77,002)	(44,877)	(6,137)	(10,816)	(157,220)
Amortization of Actuarial (Gains)/Losses	(3,872)	(16,820)	(10,176)	(1,680)	(2,306)	(34,854)
Annual OPEB Cost	99,381	398,172	220,904	21,553	57,620	797,630
Expected Employer Contribution	56,032	203,488	105,429	23,448	24,512	412,909
Contribution (Withdrawal) to/from Trust Fund over 30 Years	26,190	109,816	62,537	8,786	15,671	223,000
Total Expected Employer Payments	82,222	313,304	167,966	32,234	40,183	635,909
Increase (Decrease) in OPEB Obligation (Asset)	17,159	84,868	52,938	(10,681)	17,437	161,721
OPEB Obligation (Asset) at end of year	332,432	1,430,614	844,514	64,974	216,574	2,889,108
AAL as of June 30, 2018	1,231,165	5,162,722	2,940,018	413,066	736,752	10,483,723
Plan Assets as of June 30, 2018	25,650	548,124	315,787	44,238	77,855	1,011,654
Unfunded Actuarial Liability as of June 30, 2018	1,205,515	4,614,598	2,624,231	368,828	658,897	9,472,069

EXHIBIT AFinancial Statement Disclosure

(As of June 30, 2016)

(continued)

7. FUNDED STATUS AND FUNDING PROGRESS

As of June 30, 2016, the most recent valuation date, the plan was 6.34% funded. The actuarial liability for benefits was \$9,892,614, and the actuarial value of assets was \$627,014, resulting in an unfunded actuarial accrued liability (UAAL) of \$9,265,600. 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 \$13,030,200 or by 31.7% and the corresponding Normal Cost would increase to \$597,450 or by 63.4%. 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 \$7,698,730 or by 22.2% and the corresponding Normal Cost would decrease to \$253,815 or by 30.6%.

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2016)

(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: Entry Age Normal
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: Amortized increasing at 4.50% per year
over 30 years at transition
Remaining Amortization Period: 24 years at June 30, 2016

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2016)

(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 was amortized beginning in 2008 over a 30 year period with amortization payments increasing at 4.50% per year. 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	9,613,010
2. Actuarial Value of Assets at prior valuation date	<u>0</u>
3. Unfunded Actuarial Accrued Liability at prior valuation date [1. - 2.]	9,613,010
4. Normal Cost for prior periods	1,213,128
5. Employer Contributions for prior periods	(1,101,165)
6. Interest to current valuation date	<u>1,271,266</u>
7. Expected Unfunded Actuarial Accrued Liability [3. + 4. + 5. + 6.]	10,996,239

Actual Unfunded Actuarial Liability

8. Actuarial Accrued Liability at current valuation date	9,892,614
9. Actuarial Value of Assets at current valuation date	<u>627,014</u>
10. Unfunded Actuarial Accrued Liability at current valuation date [8. - 9.]	9,265,600

Net Actuarial (Gain) / Loss from Plan Experience [10. - 7.] **(1,730,639)**

11. Unfunded Actuarial Accrued Liability at current valuation date [10.]	9,265,600
12. Remaining Initial Unfunded to be amortized	<u>10,234,285</u>
13. Actuarial (Gain) / Loss to be amortized: [11. - 12.]	(968,685)

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2016)
(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	9,861,007	30	10,234,285	24	403,323
June 30, 2016	Cumulative (Gain) / Loss	(968,685)	30	(968,685)	30	(53,865)
June 30, 2016	Adjustment to ARC	(2,485,495)	30	(2,485,495)	30	(138,208)
Total				6,780,105		211,250

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 Sherborn has established an irrevocable trust for the purposes of prefunding liabilities under GASB 45.

EXHIBIT AFinancial Statement Disclosure

(As of June 30, 2016)

(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, 2016, the AAL for the excise tax is \$209,171 and the increase in annual OPEB Cost is \$27,727. Given your premiums through the 2016 fiscal year and the excise tax threshold, your single premiums are within 71.49% of the excise tax and your family premiums are within 15.38% 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 June 30, 2016)

(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 Sherborn nor have we attempted to value the impact of prior Town of Sherborn employees currently working at other governmental entities in the State of Massachusetts.

EXHIBIT B

Reconciliation of Plan Participation
(As of June 30, 2016)

ACTIVE EMPLOYEES

	<u>June 30, 2016</u>	<u>June 30, 2013</u>
A. Average Age at Hire	39.45	38.93
B. Average Service	11.44	10.98
C. Average Current Age	50.89	49.91

RETIRED EMPLOYEES & DEPENDENTS

	<u>June 30, 2016</u>	<u>June 30, 2013</u>
I. Retirees		
A. Under Age 65	13	17
B. Age 65 & Over	<u>60</u>	<u>49</u>
C. Total Retirees	73	66
II. Dependents of Retirees		
A. Under Age 65	9	8
B. Age 65 & Over	<u>7</u>	<u>0</u>
C. Total Retirees	16	8
III. Retirees & Dependents		
A. Under Age 65	22	25
B. Age 65 & Over	<u>67</u>	<u>49</u>
C. Total Retirees	89	74

EXHIBIT C

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

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

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of June 30	II. Plan Assets as of June 30	III. Unfunded Accrued Actuarial Liability ("UAAL") [I. - II.]	IV. Normal Cost	V. Expected Amortization (increasing at 4.50%)	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. Excess Employer Payments (beyond claims)
2016	9,892,614	627,014	9,265,600	365,590	403,323	99,420	(138,209)	(53,865)	676,259	2,485,495	372,166	100,000
2017	10,149,087	754,075	9,395,012	407,213	421,472	107,583	(149,557)	(42,517)	744,194	2,689,588	383,395	223,000
2018	10,483,723	1,011,654	9,472,069	436,170	440,439	113,095	(157,220)	(34,854)	797,630	2,827,387	412,909	223,000
2019	10,834,264	1,279,536	9,554,728	459,256	460,258	119,565	(166,212)	(25,862)	847,005	2,989,108	447,117	223,000
2020	11,178,600	1,558,134	9,620,466	481,776	480,969	126,640	(176,048)	(16,026)	897,311	3,165,996	445,626	210,000
2021	11,556,991	1,834,618	9,722,373	508,239	502,613	136,307	(189,486)	(2,588)	955,085	3,407,681	461,036	205,000
2022	12,068,362	2,117,063	9,951,299	535,491	525,231	147,870	(205,560)	13,486	1,016,518	3,696,730	486,386	200,000
2023	12,602,166	2,405,706	10,196,460	562,589	548,867	161,075	(223,916)	31,842	1,080,457	4,026,861	496,492	200,000
2024	13,174,994	2,705,895	10,469,099	586,503	573,565	176,433	(245,268)	53,194	1,144,427	4,410,826	512,846	200,000
2025	13,778,597	3,018,092	10,760,505	612,448	599,375	193,696	(269,266)	77,192	1,213,445	4,842,407	542,589	200,000
2026	14,402,394	3,342,776	11,059,618	639,516	626,347	212,531	(295,448)	103,374	1,286,320	5,313,264	579,643	200,000
2027	15,039,026	3,680,448	11,358,578	665,260	654,533	232,798	(323,622)	131,548	1,360,517	5,819,941	588,797	200,000
2028	15,720,110	4,031,627	11,688,483	690,412	683,987	255,667	(355,414)	163,340	1,437,992	6,391,662	632,031	200,000
2029	16,409,631	4,396,853	12,012,778	722,710	714,767	279,905	(389,109)	197,035	1,525,308	6,997,622	692,492	200,000
2030	17,097,445	4,776,688	12,320,757	754,387	746,931	305,217	(424,298)	232,224	1,614,461	7,630,438	702,997	200,000
2031	17,834,789	5,171,716	12,663,073	784,706	780,543	333,676	(463,858)	271,784	1,706,851	8,341,902	742,659	200,000
2032	18,608,926	5,582,545	13,026,381	817,581	815,668	364,244	(506,352)	314,278	1,805,419	9,106,095	788,824	200,000
2033	19,383,190	6,009,808	13,373,382	854,033	852,373	396,907	(551,760)	359,686	1,911,239	9,922,690	805,188	200,000
2034	20,209,317	6,454,161	13,755,156	893,876	890,730	433,150	(602,141)	410,067	2,025,682	10,828,741	814,408	200,000
2035	21,100,337	6,916,288	14,184,049	929,769	930,814	473,600	(658,374)	466,300	2,142,109	11,840,015	834,070	200,000
2036	22,039,363	7,396,900	14,642,463	972,798	972,701	517,923	(719,988)	527,914	2,271,348	12,948,055	833,539	200,000
2037	23,065,768	7,896,737	15,169,031	1,014,670	1,016,473	567,434	(788,817)	596,743	2,406,503	14,185,864	859,144	200,000
2038	24,125,305	8,416,567	15,708,738	1,059,179	1,062,214	621,329	(863,738)	671,664	2,550,648	15,533,223	900,442	200,000
2039	25,282,099	8,957,190	16,324,909	1,105,157	1,110,014	679,337	(944,378)	752,304	2,702,434	16,983,429	941,605	200,000
2040	26,463,477	9,519,438	16,944,039	1,154,669	0	741,770	(1,031,169)	839,095	2,704,365	18,544,258	1,015,653	200,000
2041	27,666,592	10,104,176	17,562,416	1,208,209	0	761,319	(1,058,345)	866,271	2,704,365	19,032,970	1,113,077	200,000
2042	28,872,192	10,712,304	18,159,888	1,262,764	0	779,894	(1,084,167)	892,093	1,777,454	1,850,584	1,166,711	200,000
2043	30,126,975	11,344,757	18,782,218	1,322,028	0	799,249	(1,111,073)	918,999	1,929,203	19,981,221	1,208,292	200,000
2044	31,491,743	12,002,508	19,489,235	1,382,720	0	820,085	(1,140,040)	947,966	2,010,731	20,502,133	1,317,404	200,000
2045	32,819,342	12,686,569	20,132,773	1,446,511	0	839,819	(1,167,471)	975,397	2,094,256	2,010,731	1,375,483	200,000
2046	34,205,984	13,397,993	20,807,991	1,512,526	0	860,570	(1,196,317)	1,196,317	2,373,096	21,514,234	1,434,120	200,000
2047	35,655,765	14,137,874	21,517,891	1,580,691	0	890,128	(1,237,409)	1,237,409	2,470,819	22,253,209	1,517,289	200,000

EXHIBIT D

Projected Cash Flows (Open Group) – Funded Approach

Total Medical & 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 June 30	II. Plan Assets as of June 30	III. Unfunded Accrued Actuarial Liability ("UAAAL") [I. - II.]	IV. Normal Cost	V. Expected Amortization (increasing at 4.50%)	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)
										2,485,495		
2016	6,975,090	627,014	6,348,076	193,345	528,671	173,985	(187,193)	(292,687)	416,121	2,345,253	372,166	184,197
2017	7,041,931	855,102	6,186,829	200,316	552,461	164,168	(176,631)	(303,249)	450,879	2,228,540	383,395	184,197
2018	7,268,603	1,099,156	6,169,447	213,754	577,321	155,998	(167,841)	(312,039)	482,209	2,113,643	412,909	184,197
2019	7,498,663	1,360,294	6,138,369	224,623	603,300	147,955	(159,188)	(320,692)	511,827	1,994,156	447,117	184,197
2020	7,715,695	1,639,712	6,075,983	234,715	630,448	139,591	(150,189)	(329,691)	541,509	1,905,842	445,626	184,197
2021	7,959,778	1,938,689	6,021,089	247,314	658,818	133,409	(143,537)	(336,343)	576,995	1,837,604	461,036	184,197
2022	8,290,087	2,258,594	6,031,493	260,559	688,464	128,632	(138,398)	(341,482)	615,659	1,782,680	486,386	184,197
2023	8,632,608	2,600,893	6,031,715	273,754	719,445	124,788	(134,261)	(345,619)	656,425	1,758,416	496,492	184,197
2024	9,003,707	2,967,153	6,036,554	285,377	751,820	123,089	(132,434)	(347,446)	699,006	1,760,379	512,846	184,197
2025	9,398,214	3,359,051	6,039,163	297,862	785,652	123,227	(132,582)	(347,298)	745,715	1,779,308	542,589	184,197
2026	9,805,749	3,778,382	6,027,367	310,921	821,007	124,552	(134,007)	(345,873)	795,648	1,811,116	579,643	184,197
2027	10,220,072	4,227,066	5,993,006	323,246	857,952	126,778	(136,403)	(343,477)	847,227	1,885,349	588,797	184,197
2028	10,669,998	4,707,158	5,962,840	335,028	896,560	131,975	(141,994)	(337,886)	902,819	1,971,940	632,031	184,197
2029	11,121,477	5,220,856	5,900,621	350,805	936,906	138,036	(148,515)	(331,365)	964,955	2,060,206	692,492	184,197
2030	11,564,365	5,770,513	5,793,852	366,374	979,067	144,215	(155,163)	(324,717)	1,028,732	2,201,744	702,997	184,197
2031	12,045,683	6,358,646	5,687,037	381,181	1,023,125	154,122	(165,823)	(314,057)	1,097,294	2,372,182	742,659	184,197
2032	12,551,303	6,987,948	5,563,355	397,182	1,069,166	166,053	(178,659)	(301,221)	1,170,993	2,570,154	788,824	184,197
2033	13,050,048	7,661,301	5,388,747	415,269	1,117,279	179,911	(193,570)	(286,310)	1,250,795	2,831,564	805,188	184,197
2034	13,584,782	8,381,789	5,202,993	435,211	1,167,557	198,210	(213,257)	(266,623)	1,339,036	3,171,995	814,408	184,197
2035	14,170,002	9,152,711	5,017,291	452,916	1,220,097	222,040	(238,897)	(240,983)	1,432,768	3,586,496	834,070	184,197
2036	14,793,917	9,977,598	4,816,319	474,429	1,275,002	251,055	(270,115)	(209,765)	1,537,913	4,106,673	833,539	184,197
2037	15,482,810	10,860,227	4,622,583	495,391	1,332,378	287,467	(309,292)	(170,588)	1,652,350	4,715,682	859,144	184,197
2038	16,202,084	11,804,640	4,397,444	517,680	1,392,335	330,098	(355,159)	(124,721)	1,776,965	5,408,008	900,442	184,197
2039	16,993,782	12,815,162	4,178,620	540,588	1,454,990	378,561	(407,301)	(72,579)	1,910,659	6,192,865	941,605	184,197
2040	17,802,110	13,896,420	3,905,690	565,528	0	433,501	(466,412)	(13,468)	535,136	5,528,151	1,015,653	184,197
2041	18,629,515	15,053,366	3,576,149	592,511	0	386,971	(416,349)	(63,531)	515,220	4,746,097	1,113,077	184,197
2042	19,457,686	16,291,299	3,166,387	620,095	0	332,227	(357,449)	(122,431)	487,651	3,882,840	1,166,711	184,197
2043	20,321,558	17,615,887	2,705,671	650,208	0	271,799	(292,434)	(187,446)	456,842	2,947,193	1,208,292	184,197
2044	21,266,863	19,033,196	2,233,667	681,016	0	206,304	(221,966)	(257,914)	421,621	1,867,213	1,317,404	184,197
2045	22,172,339	20,549,717	1,622,622	713,520	0	130,705	(140,628)	(339,252)	377,936	685,469	1,375,483	184,197
2046	23,117,167	22,172,394	944,773	747,262	0	47,983	(51,626)	51,626	808,168	(124,680)	1,434,120	184,197
2047	24,101,679	23,908,659	193,020	782,325	0	(8,727)		9,390	5,643	800,726	(1,025,440)	1,517,289

EXHIBIT D

Projected Cash Flows (Open Group) – Funded Approach

Total Medical & 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 June 30	II. Plan Assets as of June 30	III. Unfunded Accrued Actuarial Liability ("UAAL") [I. - II.]	IV. Normal Cost	V. Expected Amortization (increasing at 4.50%)	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)
2016	6,975,090	627,014	6,348,076	193,345	528,671	173,985	(187,193)	(292,687)	416,121	2,485,495	372,166	142,929
2017	7,041,931	813,834	6,228,097	200,316	552,461	164,168	(176,631)	(303,249)	450,879	2,386,521	383,395	146,502
2018	7,268,603	1,017,304	6,251,299	213,754	577,321	155,998	(167,841)	(312,039)	482,209	2,307,503	412,909	150,165
2019	7,498,663	1,238,680	6,259,983	224,623	603,300	147,955	(159,188)	(320,692)	511,827	2,226,638	447,117	153,919
2020	7,715,695	1,479,307	6,236,388	234,715	630,448	139,591	(150,189)	(329,691)	541,509	2,137,429	445,626	157,767
2021	7,959,778	1,740,625	6,219,153	247,314	658,818	133,409	(143,537)	(336,343)	576,995	2,075,545	461,036	161,711
2022	8,290,087	2,024,180	6,265,907	260,559	688,464	128,632	(138,398)	(341,482)	615,659	2,029,793	486,386	165,754
2023	8,632,608	2,331,627	6,300,981	273,754	719,445	124,788	(134,261)	(345,619)	656,425	1,993,312	496,492	169,898
2024	9,003,707	2,664,739	6,338,968	285,377	751,820	123,089	(132,434)	(347,446)	699,006	1,983,347	512,846	174,145
2025	9,398,214	3,025,416	6,372,798	297,862	785,652	123,227	(132,582)	(347,298)	745,715	1,995,362	542,589	178,499
2026	9,805,749	3,415,694	6,390,055	310,921	821,007	124,552	(134,007)	(345,873)	795,648	2,019,989	579,643	182,961
2027	10,220,072	3,837,754	6,382,318	323,246	857,952	126,778	(136,403)	(343,477)	847,227	2,053,033	588,797	187,535
2028	10,669,998	4,293,932	6,376,066	335,028	896,560	131,975	(141,994)	(337,886)	902,819	2,123,928	632,031	192,223
2029	11,121,477	4,786,730	6,334,747	350,805	936,906	138,036	(148,515)	(331,365)	964,955	2,202,493	692,492	197,029
2030	11,564,365	5,318,830	6,245,535	366,374	979,067	144,215	(155,163)	(324,717)	1,028,732	2,277,927	702,997	201,955
2031	12,045,683	5,893,103	6,152,580	381,181	1,023,125	154,122	(165,823)	(314,057)	1,097,294	2,401,707	742,659	207,004
2032	12,551,303	6,512,624	6,038,679	397,182	1,069,166	166,053	(178,659)	(301,221)	1,170,993	2,549,338	788,824	212,179
2033	13,050,048	7,180,687	5,869,361	415,269	1,117,279	179,911	(193,570)	(286,310)	1,250,795	2,719,328	805,188	217,483
2034	13,584,782	7,900,818	5,683,964	435,211	1,167,557	198,210	(213,257)	(266,623)	1,339,036	2,947,452	814,408	222,920
2035	14,170,002	8,676,795	5,493,207	452,916	1,220,097	222,040	(238,897)	(240,983)	1,432,768	3,249,160	834,070	228,493
2036	14,793,917	9,512,664	5,281,253	474,429	1,275,002	251,055	(270,115)	(209,765)	1,537,913	3,619,365	833,539	234,205
2037	15,482,810	10,412,755	5,070,055	495,391	1,332,378	287,467	(309,292)	(170,588)	1,652,350	4,089,534	859,144	240,060
2038	16,202,084	11,381,708	4,820,376	517,680	1,392,335	330,098	(355,159)	(124,721)	1,776,965	4,642,680	900,442	246,062
2039	16,993,782	12,424,490	4,569,292	540,588	1,454,990	378,561	(407,301)	(72,579)	1,910,659	5,273,141	941,605	252,214
2040	17,802,110	13,546,418	4,255,692	565,528	0	433,501	(466,412)	(13,468)	535,136	5,989,981	1,015,653	258,519
2041	18,629,515	14,753,186	3,876,329	592,511	0	386,971	(416,349)	(63,531)	515,220	5,250,945	1,113,077	264,982
2042	19,457,686	16,050,891	3,406,795	620,095	0	332,227	(357,449)	(122,431)	487,651	4,388,106	1,166,711	271,607
2043	20,321,558	17,446,060	2,875,498	650,208	0	271,799	(292,434)	(187,446)	456,842	3,437,439	1,208,292	278,397
2044	21,266,863	18,945,681	2,321,182	681,016	0	206,304	(221,966)	(257,914)	421,621	2,407,592	1,317,404	285,357
2045	22,172,339	20,557,236	1,615,103	713,520	0	130,705	(140,628)	(339,252)	377,936	1,226,452	1,375,483	292,491
2046	23,117,167	22,288,734	828,433	747,262	0	47,983	(51,626)	51,626	808,168	(63,586)	1,434,120	299,803

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	VII. Present	VIII. Present Value at 4.00% of Total Funding Costs + VII.]	IX. Plan Assets at Beginning of year	X. Unfunded Accrued Actuarial Liability ["UAAAL"]	XI. Present Value at 4.00% of Unfunded Accrued Actuarial Liability ("UAAAL")
						Value at 4.00% of Employer Share of Premiums / Claims including "implicit cost"	Value at 4.00% of Funding Normal Cost beyond claims			Value at 4.00% of Total Funding Costs + VII.]	["UAAAL"]
2016	9,892,614	365,590	372,166	(6,576)	365,590	372,166	(6,576)	365,590	627,014	9,265,600	9,265,600
2017	10,149,087	407,213	383,395	23,818	407,213	368,649	22,902	391,551	645,519	9,503,568	9,138,046
2018	10,483,723	436,170	412,909	23,261	436,170	381,758	21,506	403,264	695,158	9,788,565	9,050,079
2019	10,834,264	459,256	447,117	12,139	459,256	397,485	10,792	408,277	746,225	10,088,039	8,968,230
2020	11,178,600	481,776	445,626	36,150	481,776	380,923	30,901	411,824	788,213	10,390,387	8,881,746
2021	11,556,991	508,239	461,036	47,203	508,239	378,938	38,797	417,735	855,892	10,701,099	8,795,523
2022	12,068,362	535,491	486,386	49,105	535,491	384,398	38,808	423,206	937,331	11,131,031	8,797,015
2023	12,602,166	562,589	496,492	66,097	562,589	377,293	50,228	427,521	1,023,929	11,578,237	8,798,509
2024	13,174,994	586,503	512,846	73,657	586,503	374,732	53,820	428,552	1,130,983	12,044,011	8,800,441
2025	13,778,597	612,448	542,589	69,859	612,448	381,216	49,082	430,298	1,249,879	12,528,718	8,802,511
2026	14,402,394	639,516	579,643	59,873	639,516	391,586	40,448	432,034	1,369,733	13,032,661	8,804,399
2027	15,039,026	665,260	588,797	76,463	665,260	382,471	49,669	432,140	1,484,395	13,554,631	8,804,830
2028	15,720,110	690,412	632,031	58,381	690,412	394,765	36,465	431,230	1,620,234	14,099,876	8,806,741
2029	16,409,631	722,710	692,492	30,218	722,710	415,893	18,148	434,041	1,743,424	14,666,207	8,808,144
2030	17,097,445	754,387	702,997	51,390	754,387	405,963	29,676	435,639	1,843,379	15,254,066	8,808,843
2031	17,834,789	784,706	742,659	42,047	784,706	412,372	23,347	435,719	1,968,504	15,866,285	8,809,985
2032	18,608,926	817,581	788,824	28,757	817,581	421,160	15,354	436,514	2,089,291	16,519,635	8,819,968
2033	19,383,190	854,033	805,188	48,845	854,033	413,362	25,076	438,438	2,201,620	17,181,570	8,820,558
2034	20,209,317	893,876	814,408	79,468	893,876	402,015	39,228	441,243	2,338,530	17,870,787	8,821,523
2035	21,100,337	929,769	834,070	95,699	929,769	395,885	45,423	441,308	2,511,539	18,588,798	8,823,032
2036	22,039,363	972,798	833,539	139,259	972,798	380,416	63,556	443,972	2,707,700	19,331,663	8,822,719
2037	23,065,768	1,014,670	859,144	155,526	1,014,670	377,021	68,250	445,271	2,955,267	20,110,501	8,825,164
2038	24,125,305	1,059,179	900,442	158,737	1,059,179	379,946	66,980	446,926	3,229,004	20,896,301	8,817,307
2039	25,282,099	1,105,157	941,605	163,552	1,105,157	382,034	66,357	448,391	3,516,901	21,765,198	8,830,714
2040	26,463,477	1,154,669	1,015,653	139,016	1,154,669	396,228	54,233	450,461	3,821,129	22,642,348	8,833,266
2041	27,666,592	1,208,209	1,113,077	95,132	1,208,209	417,534	35,686	453,220	4,112,990	23,553,602	8,835,352
2042	28,872,192	1,262,764	1,166,711	96,053	1,262,764	420,820	34,645	455,465	4,372,642	24,499,550	8,836,724
2043	30,126,975	1,322,028	1,208,292	113,736	1,322,028	419,056	39,446	458,502	4,643,601	25,483,374	8,838,056
2044	31,491,743	1,382,720	1,317,404	65,316	1,382,720	439,325	21,781	461,106	4,943,081	26,548,662	8,853,381
2045	32,819,342	1,446,511	1,375,483	71,028	1,446,511	441,051	22,775	463,826	5,206,120	27,613,222	8,854,219
2046	34,205,984	1,512,526	1,434,120	78,406	1,512,526	442,166	24,174	466,340	5,485,393	28,720,591	8,855,094

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 Liability ("AAL")	Employer Share of Premiums / Claims including "implicit cost"	Present Value at 4.00% of Employer Share of Premiums / Claims including "implicit cost"
2016	85	9,892,614	9,892,614	372,166	372,166
2017	98	10,149,087	9,758,738	383,395	368,649
2018	103	10,483,723	9,692,791	412,909	381,758
2019	105	10,834,264	9,631,621	447,117	397,485
2020	108	11,178,600	9,555,514	445,626	380,923
2021	111	11,556,991	9,499,004	461,036	378,938
2022	113	12,068,362	9,537,802	486,386	384,398
2023	114	12,602,166	9,576,610	496,492	377,293
2024	115	13,174,994	9,626,839	512,846	374,732
2025	116	13,778,597	9,680,659	542,589	381,216
2026	117	14,402,394	9,729,741	579,643	391,586
2027	117	15,039,026	9,769,065	588,797	382,471
2028	118	15,720,110	9,818,734	632,031	394,765
2029	119	16,409,631	9,855,199	692,492	415,893
2030	119	17,097,445	9,873,348	702,997	405,963
2031	119	17,834,789	9,903,025	742,659	412,372
2032	119	18,608,926	9,935,458	788,824	421,160
2033	118	19,383,190	9,950,811	805,188	413,362
2034	118	20,209,317	9,975,887	814,408	402,015
2035	117	21,100,337	10,015,115	834,070	395,885
2036	116	22,039,363	10,058,478	833,539	380,416
2037	114	23,065,768	10,122,034	859,144	377,021
2038	113	24,125,305	10,179,802	900,442	379,946
2039	111	25,282,099	10,257,613	941,605	382,034
2040	110	26,463,477	10,323,971	1,015,653	396,228
2041	109	27,666,592	10,378,204	1,113,077	417,534
2042	108	28,872,192	10,413,889	1,166,711	420,820
2043	108	30,126,975	10,448,534	1,208,292	419,056
2044	107	31,491,743	10,501,787	1,317,404	439,325
2045	106	32,819,342	10,523,568	1,375,483	441,051
2046	106	34,205,984	10,546,343	1,434,120	442,166
2047	105	35,655,765	10,570,517	1,517,289	449,816
2048	105	37,147,934	10,589,314	1,610,624	459,121
2049	104	38,678,809	10,601,636	1,591,119	436,116
2050	104	40,374,809	10,640,865	1,676,988	441,974
2051	103	42,132,411	10,677,005	1,755,416	444,850
2052	103	44,101,880	10,746,249	1,736,996	423,252
2053	102	46,130,482	10,808,227	1,826,040	427,835
2054	102	48,769,296	10,987,012	1,863,124	419,735
2055	101	51,053,361	11,059,210	1,911,727	414,119

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.