

**Town of Sherborn Other
Postemployment Benefits Plan**

GASB 45 Actuarial Valuation

as of

June 30, 2013

For the fiscal years ending

June 30, 2013

June 30, 2014

June 30, 2015

Delivered January 2014

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LETTER

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January 27, 2014

Personal and Confidential

Ms. Ruth Hohenschau
Town Accountant
Town of Sherborn
19 Washington Street
Sherborn, MA 01770

Dear Ms. Hohenschau:

We have performed an actuarial valuation of the Town of Sherborn Other Postemployment Benefits Plan for the fiscal year ending June 30, 2013. The figures presented in this report reflect the adoption, by the Town of Sherborn, 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,

Parker E. Elmore, A.S.A., E.A., M.A.A.A.
President & CEO

Enclosure

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, 2013</u>	<u>June 30, 2010</u>
I. Present Value of Future Benefits		
A. Actives	11,823,912	N/A
B. Retirees/Disabled	<u>3,720,682</u>	N/A
C. Total	15,544,594	N/A
II. Present Value of Future Normal Cost	5,931,584	N/A
III. Actuarial Accrued Liability (Projected Unit Credit)		
A. Actives	5,892,328	6,243,386
B. Retirees/Disabled	<u>3,720,682</u>	<u>3,617,622</u>
C. Total	9,613,010	9,861,008
IV. Plan Assets	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL")	9,613,010	9,861,008
VI. Funded Ratio	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 @ Beginning of Fiscal Year	1,347,897	580,887
X. Number of Eligible Participants		
A. Actives	115	121
B. Retirees/Disabled	<u>66</u>	<u>57</u>
C. Total	181	178
For the Fiscal Year Ending:	<u>June 30, 2013</u>	<u>June 30, 2010</u>
XI. Normal Cost	404,376	309,140
XII. Amortization of UAAL - 30 year increase 4.50% per yr	353,431	348,202
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	757,807	657,342
XIV. Interest on Net OPEB Obligation	53,916	27,592
XV. Adjustment to Annual Required Contribution	(74,951)	(20,512)
XVI. Amortization of Actuarial (Gains) / Losses	(30,621)	0
XVII. Annual OPEB Cost [XIII. + XIV. + XV. + XVI.]	706,151	664,422
XVIII. Expected Employer Contribution	334,325	618,348
XIX. Percentage of Annual OPEB Cost Contributed	47.3%	93.1%
XX. Net OPEB Obligation at Beginning of Year (IX.)	1,347,897	580,887
XXI. Increase in Net OPEB Obligations (XVII. - XVIII.)	371,826	46,074
XXII. Net OPEB Obligation at End of Year (XX. + XXI.)	1,719,723	626,961
XXIII. Discount Rate	4.00%	4.75%

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
 (continued)

Town of Sherborn
Assuming Pay-as-you-go funding - 4.00% discount rate
Plan Liabilities as of June 30, 2013

	<u>Medical</u>	<u>Life</u>	<u>Total</u>
I. Present Value of Future Benefits			
A. Actives	11,756,340	67,572	11,823,912
B. Retirees/Disabled	3,688,392	32,290	3,720,682
C. Total	15,444,732	99,862	15,544,594
II. Present Value of Future Normal Cost	5,907,527	24,057	5,931,584
III. Actuarial Accrued Liability (Projected Unit Credit)			
A. Actives	5,848,813	43,515	5,892,328
B. Retirees/Disabled	3,688,392	32,290	3,720,682
C. Total	9,537,205	75,805	9,613,010
IV. Plan Assets	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL")	9,537,205	75,805	9,613,010
VI. Annual Covered Payroll	N/A	N/A	N/A
VII. UAAL as % of Covered Payroll	N/A	N/A	N/A
VIII. Net OPEB Obligation @ Beginning of Fiscal Year	1,337,268	10,629	1,347,897
IX. Number of Eligible Participants			
A. Actives	115	115	
B. Retirees/Disabled	66	26	
C. Total	181	141	
For Fiscal Year Ending June 30, 2013			
X. Normal Cost	401,991	2,385	404,376
XI. Amortization of UAAL - 30 year increase 4.50% per yr	350,644	2,787	353,431
XII. Annual Required Contribution ('ARC') [X. + XI.]	752,635	5,172	757,807
XIII. Interest on Net OPEB Obligation	53,491	425	53,916
XIV. Adjustment to Annual Required Contribution	(74,360)	(591)	(74,951)
XV. Amortization of Actuarial (Gains) / Losses	(30,380)	(241)	(30,621)
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	701,386	4,765	706,151
XVII. Expected Employer Contribution	331,725	2,600	334,325
XVIII. Contribution to Trust Fund over 30 Years	0	0	0
XIX. Total Employer Contribution	331,725	2,600	334,325
XX. Percentage of Annual OPEB Cost Contributed	47.3%	54.6%	47.3%
XXI. Net OPEB Obligation at Beginning of Year (VIII.)	1,337,268	10,629	1,347,897
XXII. Increase in Net OPEB Obligations (XVI. - XVII.)	369,661	2,165	371,826
XXIII. Net OPEB Obligation at End of Year (XXI. + XXII.)	1,706,929	12,794	1,719,723

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sherborn
Plan Liabilities as of June 30, 2013
Assuming maintain pay-as-you-go funding method

	Town 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	1,552,731	6,398,655	2,546,659	388,369	937,498	11,823,912
B. Retirees/Disabled	<u>173,257</u>	<u>1,757,888</u>	<u>1,499,913</u>	<u>46,937</u>	<u>242,687</u>	<u>3,720,682</u>
C. Total	1,725,988	8,156,543	4,046,572	435,306	1,180,185	15,544,594
II. Present Value of Future Normal Cost	470,639	3,078,837	1,954,400	65,509	362,199	5,931,584
III. Actuarial Accrued Liability (Projected Unit Credit)						
A. Actives	1,082,092	3,319,818	592,259	322,860	575,299	5,892,328
B. Retirees/Disabled	<u>173,257</u>	<u>1,757,888</u>	<u>1,499,913</u>	<u>46,937</u>	<u>242,687</u>	<u>3,720,682</u>
C. Total	1,255,349	5,077,706	2,092,172	369,797	817,986	9,613,010
IV. Plan Assets	0	0	0	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL")	1,255,349	5,077,706	2,092,172	369,797	817,986	9,613,010
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	155,773	698,540	338,056	45,621	109,907	1,347,897
IX. Number of Eligible Participants						
A. Actives	19	69	14	4	9	115
B. Retirees/Disabled	<u>6</u>	<u>42</u>	<u>11</u>	<u>1</u>	<u>6</u>	<u>66</u>
C. Total	25	111	25	5	15	181
For Fiscal Year Ending June 30, 2013						
X. Normal Cost	56,894	233,103	76,147	11,630	26,602	404,376
XI. Amortization of UAAL - 30 year increase 4.50% per yr	40,841	183,161	88,649	11,962	28,818	353,431
XII. Annual Required Contribution ("ARC") [X. + XI.]	97,735	416,264	164,796	23,592	55,420	757,807
XIII. Interest on Net OPEB Obligation	6,231	27,941	13,523	1,824	4,397	53,916
XIV. Adjustment to Annual Required Contribution	(8,662)	(38,843)	(18,797)	(2,537)	(6,112)	(74,951)
XV. Amortization of Actuarial (Gains) / Losses	(3,999)	(16,174)	(6,664)	(1,178)	(2,606)	(30,621)
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	91,305	389,188	152,858	21,701	51,099	706,151
XVII. Expected Employer Contribution	27,036	187,853	74,067	15,817	29,552	334,325
XVIII. Contribution to Trust Fund over 30 Years	0	0	0	0	0	0
XIX. Total Employer Contribution	27,036	187,853	74,067	15,817	29,552	334,325
XX. Percentage of Annual OPEB Cost Contributed	29.6%	48.3%	48.5%	72.9%	57.8%	47.3%
XXI. Net OPEB Obligation at Beginning of Year (VIII.)	155,773	698,540	338,056	45,621	109,907	1,347,897
XXII. Increase in Net OPEB Obligations (XVI. - XVII.)	64,269	201,335	78,791	5,884	21,547	371,826
XXIII. Net OPEB Obligation at End of Year (XXI. + XXII.)	220,042	899,875	416,847	51,505	131,454	1,719,723

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, 2013**

	<u>Present Value of Future Benefits</u>	<u>Actuarial Accrued Liability (Projected Unit Credit)</u>	<u>Normal Cost</u>
Actives			
Under Age 65			
A. Participants	2,016,859	880,600	84,853
B. Spouses	<u>1,225,190</u>	<u>503,038</u>	<u>49,551</u>
C. Total	3,242,049	1,383,638	134,404
Age 65 and Over			
A. Participants	4,869,215	2,583,307	109,214
B. Spouses	<u>3,712,648</u>	<u>1,925,383</u>	<u>160,758</u>
C. Total	8,581,863	4,508,690	269,972
Actives Total			
A. Participants	6,886,074	3,463,907	194,067
B. Spouses	<u>4,937,838</u>	<u>2,428,421</u>	<u>210,309</u>
C. Total	11,823,912	5,892,328	404,376
Retirees/Disabled			
Under Age 65			
A. Participants	520,966	520,966	0
B. Spouses	<u>283,754</u>	<u>283,754</u>	<u>0</u>
C. Total	804,720	804,720	0
Age 65 and Over			
A. Participants	2,464,968	2,464,968	<u>0</u>
B. Spouses	<u>450,994</u>	<u>450,994</u>	<u>0</u>
C. Total	2,915,962	2,915,962	0
Retirees/Disabled Total			
A. Participants	2,985,934	2,985,934	0
B. Spouses	<u>734,748</u>	<u>734,748</u>	<u>0</u>
C. Total	3,720,682	3,720,682	0
Total Population			
A. Participants	9,872,008	6,449,841	194,067
B. Spouses	<u>5,672,586</u>	<u>3,163,169</u>	<u>210,309</u>
C. Total	15,544,594	9,613,010	404,376

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sherborn
Assuming Funding over 30 years at 7.00% discount rate and increasing at 4.50%
per year
Plan Liabilities as of June 30, 2013

	<u>Medical</u>	<u>Life</u>	<u>Total</u>
I. Present Value of Future Benefits			
A. Actives	6,306,550	28,312	6,334,862
B. Retirees/Disabled	<u>2,745,477</u>	<u>30,746</u>	<u>2,776,223</u>
C. Total	<u>9,052,027</u>	59,058	9,111,085
II. Present Value of Future Normal Cost	2,642,308	8,372	2,650,680
III. Actuarial Accrued Liability (Projected Unit Credit)			
A. Actives	3,664,242	19,940	3,684,182
B. Retirees/Disabled	<u>2,745,477</u>	<u>30,746</u>	<u>2,776,223</u>
C. Total	6,409,719	50,686	6,460,405
IV. Plan Assets	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL")	6,409,719	50,686	6,460,405
VI. Annual Covered Payroll	N/A	N/A	N/A
VII. UAAL as % of Covered Payroll	N/A	N/A	N/A
VIII. Net OPEB Obligation	1,337,268	10,629	1,347,897
IX. Number of Eligible Participants			
A. Actives	115	115	
B. Retirees/Disabled	<u>66</u>	<u>26</u>	
C. Total	181	141	
For Fiscal Year Ending June 30, 2013			
X. Normal Cost	220,351	1,239	221,590
XI. Amortization of UAAL - 30 year increase 4.50% per yr	495,730	3,949	499,679
XII. Annual Required Contribution ('ARC') [X. + XI.]	716,081	5,188	721,269
XIII. Interest on Net OPEB Obligation	93,609	744	94,353
XIV. Adjustment to Annual Required Contribution	(100,716)	(801)	(101,517)
XV. Amortization of Actuarial (Gains) / Losses	(282,193)	3,282	(278,911)
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	426,781	8,413	435,194
XVII. Expected Employer Contribution	331,725	2,600	334,325
XVIII. Contribution over 30 Years increasing at 4.50% per yr	130,609	5,813	136,422
XIX. Total Employer Contribution	462,334	8,413	470,747
XX. Percentage of Annual OPEB Cost Contributed	108.3%	100.0%	108.2%
XXI. Net OPEB Obligation at Beginning of Year (VIII.)	1,337,268	10,629	1,347,897
XXII. Increase in Net OPEB Obligations (XVI. - XVII.)	(35,553)	0	(35,553)
XXIII. Net OPEB Obligation at End of Year (XXI. + XXII.)	1,301,715	10,629	1,312,344

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sherborn
Plan Liabilities as of June 30, 2013
Assuming Funding over 30 years at 7.00% discount rate and increasing at 4.50% per year

	Town 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	831,902	3,428,188	1,364,416	208,075	502,281	6,334,862
B. Retirees/Disabled	<u>129,278</u>	<u>1,311,665</u>	<u>1,119,175</u>	<u>35,022</u>	<u>181,083</u>	<u>2,776,223</u>
C. Total	961,180	4,739,853	2,483,591	243,097	683,364	9,111,085
II. Present Value of Future Normal Cost	210,317	1,375,857	873,374	29,274	161,858	2,650,680
III. Actuarial Accrued Liability (Projected Unit Credit)						
A. Actives	676,580	2,075,718	370,310	201,868	359,706	3,684,182
B. Retirees/Disabled	<u>129,278</u>	<u>1,311,665</u>	<u>1,119,175</u>	<u>35,022</u>	<u>181,083</u>	<u>2,776,223</u>
C. Total	805,858	3,387,383	1,489,485	236,890	540,789	6,460,405
IV. Plan Assets	0	0	0	0	0	0
V. Unfunded Actuarial Accrued Liability ("UAAL")	805,858	3,387,383	1,489,485	236,890	540,789	6,460,405
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	155,773	698,540	338,056	45,621	109,907	1,347,897
IX. Number of Eligible Participants						
A. Actives	19	69	14	4	9	115
B. Retirees/Disabled	<u>6</u>	<u>42</u>	<u>11</u>	<u>1</u>	<u>6</u>	<u>66</u>
C. Total	25	111	25	5	15	181
For Fiscal Year Ending June 30, 2013						
X. Normal Cost	31,177	127,736	41,727	6,373	14,577	221,590
XI. Amortization of UAAL - 30 year increase 4.50% per yr	57,740	258,952	125,332	16,912	40,743	499,679
XII. Annual Required Contribution ("ARC") [X. + XI.]	88,917	386,688	167,059	23,285	55,320	721,269
XIII. Interest on Net OPEB Obligation	10,904	48,897	23,665	3,192	7,695	94,353
XIV. Adjustment to Annual Required Contribution	<u>(11,732)</u>	<u>(52,611)</u>	<u>(25,460)</u>	<u>(3,436)</u>	<u>(8,278)</u>	<u>(101,517)</u>
XV. Amortization of Actuarial (Gains) / Losses	<u>(36,424)</u>	<u>(147,321)</u>	<u>(60,699)</u>	<u>(10,730)</u>	<u>(23,737)</u>	<u>(278,911)</u>
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	51,665	235,653	104,565	12,311	31,000	435,194
XVII. Expected Employer Contribution	27,036	187,853	74,067	15,817	29,552	334,325
XVIII. Contribution over 30 Years increasing at 4.50% per yr	17,017	71,530	31,453	5,002	11,420	136,422
XIX. Total Employer Contribution	44,053	259,383	105,520	20,819	40,972	470,747
XX. Percentage of Annual OPEB Cost Contributed	85.3%	110.1%	100.9%	169.1%	132.2%	108.2%
XXI. Net OPEB Obligation at Beginning of Year (VIII.)	155,773	698,540	338,056	45,621	109,907	1,347,897
XXII. Increase in Net OPEB Obligations (XVI. - XIX.)	7,612	<u>(23,730)</u>	<u>(955)</u>	<u>(8,508)</u>	<u>(9,972)</u>	<u>(35,553)</u>
XXIII. Net OPEB Obligation at End of Year (XXI. + XXII.)	163,385	674,810	337,101	37,113	99,935	1,312,344

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 OPEB liability. 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. Transition to GASB 45:

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. As part of this implementation, the Employer must recognize the Actuarial Accrued Liability for past service. Under GASB 45, this amount may be amortized over a period not to exceed thirty (30) years. The Unfunded Actuarial Accrued Liability at transition was amortized over a 30 year period with amortization payments increasing at 4.50% per year. This approach yields an amortization charge of \$353,431. Additionally the Employer must recognize a “normal cost” which represents the annual accrual of benefits for current active employees toward their ultimate postemployment benefits. The normal cost for the 2013 fiscal year is \$404,376. The combined amortization charge and normal cost represent the Annual Required Contribution (“ARC”) for the plan for the 2013 fiscal year. As the Employer has chosen to continue their “pay-as-you-go” funding policy, this valuation must utilize a discount rate which represents earnings on short term investments. For this discount rate, we have used 4.00% per annum. The incremental cost of GASB 45 for the 2013 fiscal year beyond the “pay-as-you-go” costs is \$371,826 reduced by contributions to an OPEB Trust of \$0 for a net change in the OPEB liability of \$371,826

2. Plan Experience:

Plan experience was more favorable than expected. This was mainly due to a lower than expected increase in premiums for non-Medicare integrated plans and a decrease in premiums for Medicare integrated plans this was somewhat offset by a change in assumptions in the prior valuation vs. the current valuation (discount rate lowered from 4.75% to 4.00% and the introduction of a more conservative mortality table) as well as an increase in the number of retirees & beneficiaries. The actuarial experience gain is amortized into the annual OPEB costs over a 30-year period. The net impact of plan experience is an increase in the annual OPEB cost.

SECTION II
SUMMARY 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>Credited 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. 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 Projected Unit Credit Actuarial Cost Method. Under this method, the normal cost and actuarial accrued liability are both based on an accrual of projected benefits over the period for which benefits are accrued. The normal cost is the actuarial present value of one year's benefit accrual on this basis. 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.

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 4.75%)

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 Safety Male</u>	<u>Non Public</u>	
		<u>Safety Female</u>	<u>Public Safety</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>
FY 2008	11.0%
FY 2009	10.0%
FY 2010	9.0%
FY 2011	8.0%
FY 2012	7.0%
FY 2013	6.0%
FY 2014	5.0%
FY 2015	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 husbands are three years older than their wives. 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.

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			Total
	Single	Two-Person	Family	
Harvard Pilgrim HMO	19		37	56
Harvard Pilgrim PPO	1			1
Fallon Direct	2		1	3
Fallon Select				0
Network Blue	8		11	19
Tufts EPO	11		13	24
Fallon Senior Plan				0
Tufts Medicare Preferred	8			8
Tufts Medicare Plus	4			4
Harvard Medicare Enhanced	13			13
Managed Blue for Seniors				0
Medex III	18	0		18
Total	84	0	62	146

	Per Contract Premiums (monthly) - FY 2014		
	Single	Two-Person	Family
Harvard Pilgrim HMO	610.00	0.00	1,590.00
Harvard Pilgrim PPO	1,750.00	0.00	3,886.00
Fallon Direct	505.00	0.00	1,357.00
Fallon Select	542.00		1,460.00
Network Blue	628.00		1,685.00
Tufts EPO	645.00		1,688.00
Fallon Senior Plan	279.00	558.00	
Tufts Medicare Preferred	240.00	480.00	
Tufts Medicare Plus	332.00	664.00	
Harvard Medicare Enhanced	378.00	756.00	
Managed Blue for Seniors	402.00	804.00	
Medex III	424.00	848.00	

Gross Expected FY 2014 Incurred Premiums	1,715,148
Adjustment to reflect children's claims	(287,160)
Total Expected FY 2014 Incurred Premiums (adults only)	1,427,988

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

	Employer Primary	Medicare Primary
Age 65	9,593	4,408
Average Age	8,653	4,408

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

1,427,988 Active and Retired Claims (No Children) - Including Administrative fees & trend

4,486 Average Per-Capita Claim (including Retention & Pooling)

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	5,886	2,463	0
25 to 29	7	5	1.312	0.591	5,886	2,651	54,457
30 to 34	6	4	1.312	0.712	5,886	3,194	48,092
35 to 39	2	3	1.312	0.850	5,886	3,813	23,211
40 to 44	10	7	1.312	1.000	5,886	4,486	90,262
45 to 49	7	5	1.456	1.193	6,532	5,352	72,484
50 to 54	10	6	1.599	1.441	7,173	6,464	110,514
55 to 59	14	10	1.740	1.753	7,806	7,864	187,924
60 to 64	12	16	1.968	2.102	8,828	9,430	256,816
65 to 69	3	6	2.168	2.316	9,726	10,390	91,518
70 & Over	1	1	2.396	2.557	10,748	11,471	22,219
Total	72	63					957,497

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	1	0	1.312	1.000	5,886	4,486	5,886
45 to 49	0	1	1.456	1.193	6,532	5,352	5,352
50 to 54	3	2	1.599	1.441	7,173	6,464	34,447
55 to 59	2	4	1.740	1.753	7,806	7,864	47,068
60 to 64	11	6	1.968	2.102	8,828	9,430	153,688
65 to 69	0	1	2.168	2.316	9,726	10,390	10,390
70 to 74	0	0	2.396	2.557	10,748	11,471	0
75 to 79	1	0	2.593	2.769	11,632	12,422	11,632
80 to 84	1	0	2.724	2.910	12,220	13,054	12,220
85 to 89	0	0	2.864	3.059	12,848	13,723	0
90 & Over	1	0	3.010	3.215	13,503	14,422	13,503
Total	20	14					294,186

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	8	7	2.168	2.316	4,408	4,408	66,120
70 to 74	5	6	2.396	2.557	4,408	4,408	48,488
75 to 79	3	2	2.593	2.769	4,408	4,408	22,040
80 to 84	3	3	2.724	2.910	4,408	4,408	26,448
85 to 89	2	0	2.864	3.059	4,408	4,408	8,816
90 & Over	1	0	3.010	3.215	4,408	4,408	4,408
Total	22	18					176,320
Grand Totals	114	95					1,428,003

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2013)

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: Retirees shall pay 50% of premiums.

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2013)
(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.
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 required contribution is based on the projected pay-as-you-go financing requirements. For the 2013 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$334,325. The Town is also projected to make a contribution to an OPEB Trust of \$0 for the 2013 fiscal year for a total contribution of \$334,325 .

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2013)
(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	\$757,807
Interest on net OPEB obligation	\$53,916
Adjustment to annual required contribution	(\$74,951)
Amortization of Actuarial (Gains) / Losses	(\$30,621)
Annual OPEB cost (expense)	\$706,151
Contributions made to pay benefits	\$334,325
Contributions made to OPEB Trust	\$0
Increase in net OPEB obligation	\$371,826
Net OPEB Obligation – beginning of year	\$1,347,897
Net OPEB Obligation – end of year	\$1,719,723

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2013)
(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 2013 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 in OPEB Obligation	Net OPEB Obligation
06/30/2015 (est.)	\$787,529	\$406,185	51.6%	\$381,344	\$2,485,495
06/30/2014 (est.)	\$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
06/30/2012	\$701,507	\$305,488	43.5%	\$396,019	\$1,347,897
06/30/2011	\$664,422	\$293,431	44.2%	\$370,991	\$951,878
06/30/2010	\$631,612	\$618,348	97.9%	\$13,264	\$580,887

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
06/30/2015 (est.)	\$0	\$10,264,656	\$10,264,656	0.0%	N/A	N/A
06/30/2014 (est.)	\$0	\$9,896,340	\$9,896,340	0.0%	N/A	N/A
06/30/2013	\$0	\$9,613,010	\$9,613,009	0.0%	N/A	N/A
06/30/2012	\$0	\$10,856,450	\$10,856,450	0.0%	N/A	N/A
06/30/2011	\$0	\$10,345,482	\$10,345,482	0.0%	N/A	N/A
06/30/2010	\$0	\$9,861,007	\$9,861,007	0.0%	N/A	N/A

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2013)

(continued)

Fiscal Year Ending June 30, 2013						
	<u>Town Employees and Retirees</u>	<u>School Employees and Retirees</u>	<u>Police Employees and Retirees</u>	<u>Library Employees and Retirees</u>	<u>Highway Employees and Retirees</u>	<u>Total</u>
OPEB obligation at beginning of year	155,773	698,540	338,056	45,621	109,907	1,347,897
Annual Required Contribution	97,735	416,264	164,796	23,592	55,420	757,807
Interest on Net OPEB Obligation	6,231	27,941	13,523	1,824	4,397	53,916
Adjustment to the ARC	(8,662)	(38,843)	(18,797)	(2,537)	(6,112)	(74,951)
Amortization of Actuarial (Gains)/Losses	<u>(3,999)</u>	<u>(16,174)</u>	<u>(6,664)</u>	<u>(1,178)</u>	<u>(2,606)</u>	<u>(30,621)</u>
Annual OPEB Cost	91,305	389,188	152,858	21,701	51,099	706,151
Total Expected Employer Payments	27,036	187,853	74,067	15,817	29,552	334,325
Increase in OPEB Obligation	64,269	201,335	78,791	5,884	21,547	371,826
OPEB obligation at end of year	220,042	899,875	416,847	51,505	131,454	1,719,723
APBO at beginning of year	1,255,349	5,077,706	2,092,172	369,797	817,986	9,613,010

Fiscal Year Ending June 30, 2014						
	<u>Town Employees and Retirees</u>	<u>School Employees and Retirees</u>	<u>Police Employees and Retirees</u>	<u>Library Employees and Retirees</u>	<u>Highway Employees and Retirees</u>	<u>Total</u>
OPEB obligation at beginning of year	220,042	899,875	416,847	51,505	131,454	1,719,723
Annual Required Contribution	100,838	429,480	170,028	24,341	57,179	781,866
Interest on Net OPEB Obligation	7,950	35,649	17,253	2,327	5,610	68,789
Adjustment to the ARC	(11,051)	(49,558)	(23,982)	(3,237)	(7,798)	(95,626)
Amortization of Actuarial (Gains)/Losses	<u>(1,397)</u>	<u>(4,926)</u>	<u>(2,014)</u>	<u>(534)</u>	<u>(1,075)</u>	<u>(9,946)</u>
Annual OPEB Cost	96,340	410,645	161,285	22,897	53,916	745,083
Total Expected Employer Payments	29,166	202,647	79,900	17,063	31,879	360,655
Increase in OPEB Obligation	67,174	207,998	81,385	5,834	22,037	384,428
OPEB obligation at end of year	287,216	1,107,873	498,232	57,339	153,491	2,104,151
APBO at beginning of year	1,292,349	5,227,364	2,153,836	380,696	842,095	9,896,340

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2013)

(continued)

7. FUNDED STATUS AND FUNDING PROGRESS

As of June 30, 2013, the most recent valuation date, the plan was 0.00% funded. The actuarial liability for benefits was \$9,613,010, and the actuarial value of assets was \$ 0, resulting in an unfunded actuarial accrued liability (UAAL) of \$9,613,010. 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 \$13,847,051 or by 44.0% and the corresponding Normal Cost would increase to \$751,078 or by 85.7%. 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 \$8,150,710 or by 15.2% and the corresponding Normal Cost would decrease to \$321,185 or by 20.6%.

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2013)
(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 4.75%)
Healthcare Trend Rates

<u>Year</u>	<u>Medical</u>
FY 2008	11.0%
FY 2009	10.0%
FY 2010	9.0%
FY 2011	8.0%
FY 2012	7.0%
FY 2013	6.0%
FY 2014	5.0%
FY 2015	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: 27 years at June 30, 2013

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2013)
(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 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
--

Expected Unfunded Actuarial Liability

1. Actuarial Accrued Liability at prior valuation date	9,861,008
2. Actuarial Value of Assets at prior valuation date	<u>0</u>
3. Unfunded Actuarial Accrued Liability at prior valuation date [1. - 2.]	9,861,008
4. Normal Cost for prior periods	927,420
5. Employer Contributions for prior periods	(1,217,267)
6. Interest to current valuation date	<u>1,535,167</u>
7. Expected Actuarial Accrued Liability [3. + 4. + 5. + 6.]	11,106,328

Actual Unfunded Actuarial Liability

8. Actuarial Accrued Liability at current valuation date	9,613,010
9. Actuarial Value of Assets at current valuation date	<u>0</u>
10. Unfunded Actuarial Accrued Liability at current valuation date [8. - 9.]	9,613,010

Net Actuarial (Gain) / Loss from Plan Experience [10. - 7.] **(1,493,318)**

11. Unfunded Actuarial Accrued Liability at current valuation date [10.]	9,613,010
12. Remaining Initial Unfunded to be amortized	<u>10,163,692</u>
13. Actuarial (Gain) / Loss to be amortized: [11. - 12.]	(550,682)

EXHIBIT A

Financial Statement Disclosure
(As of June 30, 2013)
(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	10,163,692	27	353,431
July 1, 2012	Cumulative (Gain) / Loss	(550,682)	30	(550,679)	30	(30,621)
July 1, 2012	Adjustment to ARC	(1,347,897)	30	(1,347,897)	30	(74,951)
Total				8,265,116		247,859

11. Recognition of OPEB trust assets

The State of Massachusetts has recently passed legislation allowing municipal entities to establish a trust for Other Than 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, the Town of Sherborn has accepted M.G.L. Chapter 32B, Section 20 which authorizes it to establish an irrevocable Trust for the purposes of prefunding liabilities under GASB 45. However, at this point they have not funded the Trust.

EXHIBIT A

Financial Statement Disclosure

(As of June 30, 2013)

(continued)

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

For purposes of this valuation, we have not attempted to value the impact of the PPACA excise tax for the cost of plan benefits beyond the statutory thresholds beginning in 2018. While the threshold levels are known, our position is to wait for more guidance on how this excise tax will work and how employers and bargaining units will respond so as to avoid overstating the impact of such a tax. Beyond that, it is not clear if this tax should be considered a "benefit" for GASB 45 purposes or should be considered an operating expense of the entity.

13. Impact of Section 9A1/2 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, 2013)

ACTIVE EMPLOYEES

	<u>June 30, 2013</u>	<u>June 30, 2010</u>
A. Average Age at Hire	38.93	37.60
B. Average Service	10.98	11.40
C. Average Current Age	49.91	49.00

EXHIBIT C

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

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

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								1,347,897				
2013	9,613,010	404,376	353,431	53,916	(74,951)	(30,621)	706,151	1,719,723	334,325	0	0	9,613,009
2014	9,896,340	412,531	369,335	68,789	(95,626)	(9,946)	745,083	2,104,151	360,655	0	0	9,896,340
2015	10,264,656	422,980	385,955	84,166	(117,003)	11,431	787,529	2,485,495	406,185	0	0	10,264,656
2016	10,663,186	435,533	403,323	99,420	(138,208)	32,636	832,704	2,883,940	434,259	0	0	10,663,186
2017	11,094,058	454,997	421,472	115,357	(160,364)	54,792	886,254	3,320,080	450,114	0	0	11,094,058
2018	11,564,870	475,905	440,439	132,804	(184,616)	79,044	943,576	3,774,863	488,793	0	0	11,564,870
2019	12,014,061	491,336	460,258	150,994	(209,904)	104,332	997,016	4,250,430	521,449	0	0	12,014,061
2020	12,463,306	514,967	480,969	170,017	(236,349)	130,777	1,060,381	4,786,427	524,384	0	0	12,463,306
2021	12,952,045	539,198	502,613	191,457	(266,153)	160,581	1,127,696	5,369,179	544,944	0	0	12,952,045
2022	13,464,215	563,045	525,230	214,767	(298,558)	192,986	1,197,470	5,994,370	572,279	0	0	13,464,215
2023	13,993,180	592,184	548,865	239,775	(333,322)	227,750	1,275,252	6,685,778	583,844	0	0	13,993,180
2024	14,561,580	617,703	573,564	267,431	(371,769)	266,197	1,353,126	7,445,786	593,118	0	0	14,561,580
2025	15,169,611	644,449	599,374	297,831	(414,029)	308,457	1,436,082	8,261,758	620,110	0	0	15,169,611
2026	15,801,709	672,620	626,346	330,471	(459,402)	353,830	1,523,865	9,129,902	655,721	0	0	15,801,709
2027	16,451,353	702,226	654,531	365,196	(507,676)	402,104	1,616,381	10,067,906	678,377	0	0	16,451,353
2028	17,134,210	734,132	683,985	402,716	(559,834)	454,262	1,715,261	11,068,747	714,420	0	0	17,134,210
2029	17,840,128	768,591	714,765	442,750	(615,487)	509,915	1,820,534	12,129,839	759,442	0	0	17,840,128
2030	18,563,246	803,344	746,930	485,193	(674,490)	568,918	1,929,895	13,275,723	784,011	0	0	18,563,246
2031	19,325,883	839,833	780,542	531,029	(738,208)	632,636	2,045,832	14,503,587	817,968	0	0	19,325,883
2032	20,121,659	880,249	815,666	580,144	(806,484)	700,912	2,170,487	15,818,588	855,486	0	0	20,121,659
2033	20,952,280	922,679	852,371	632,744	(879,606)	774,034	2,302,222	17,252,395	868,415	0	0	20,952,280
2034	21,846,806	967,587	890,727	690,096	(959,335)	853,763	2,442,838	18,816,614	878,619	0	0	21,846,806
2035	22,813,203	1,012,855	930,810	752,665	(1,046,314)	940,742	2,590,758	20,501,094	906,278	0	0	22,813,203
2036	23,836,572	1,059,919	972,696	820,044	(1,139,981)	1,034,409	2,747,087	22,327,371	920,810	0	0	23,836,572
2037	24,934,708	1,106,158	1,016,467	893,095	(1,241,533)	1,135,961	2,910,148	24,285,214	952,305	0	0	24,934,708
2038	26,092,103	1,152,926	1,062,208	971,408	(1,350,400)	1,244,828	3,080,970	26,372,370	993,814	0	0	26,092,103
2039	27,301,264	1,196,756	1,110,008	1,054,895	(1,466,459)	1,360,887	3,256,087	28,593,836	1,034,621	0	0	27,301,264
2040	28,561,971	1,246,378	0	1,143,753	(1,589,985)	1,484,413	2,284,559	29,789,990	1,088,405	0	0	28,561,971
2041	29,868,741	1,297,716	0	1,191,599	(1,656,498)	1,550,926	2,383,743	31,015,307	1,158,426	0	0	29,868,741
2042	31,208,351	1,351,245	0	1,240,612	(1,724,633)	1,619,061	2,486,285	32,283,740	1,217,852	0	0	31,208,351
2043	32,595,414	1,409,761	0	1,291,349	(1,795,165)	1,795,165	2,701,110	33,722,574	1,262,276	0	0	32,595,414
2044	34,052,615	1,470,760	0	1,348,903	(1,875,173)	1,875,173	2,819,663	35,190,889	1,351,348	0	0	34,052,615

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 4.50% per year

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								1,347,897				
2013	6,460,405	221,590	499,679	94,353	(101,517)	(278,911)	435,194	1,312,344	334,325	136,422	0	6,460,405
2014	6,684,167	222,950	522,165	91,864	(98,839)	(281,589)	456,551	1,265,679	360,655	142,561	136,422	6,547,745
2015	6,972,585	226,639	545,663	88,598	(95,324)	(285,104)	480,472	1,190,990	406,185	148,976	288,533	6,684,052
2016	7,280,178	231,253	570,218	83,369	(89,699)	(290,729)	504,412	1,105,463	434,259	155,680	457,706	6,822,472
2017	7,613,071	240,906	595,878	77,382	(83,258)	(297,170)	533,738	1,026,401	450,114	162,686	645,425	6,967,646
2018	7,981,018	251,507	622,693	71,848	(77,303)	(303,125)	565,620	933,221	488,793	170,007	853,291	7,127,727
2019	8,285,792	258,227	650,714	65,325	(70,285)	(310,143)	593,838	827,953	521,449	177,657	1,083,028	7,202,764
2020	8,584,150	270,067	679,996	57,957	(62,357)	(318,071)	627,592	745,509	524,384	185,652	1,336,497	7,247,653
2021	8,912,921	282,407	710,596	52,186	(56,148)	(324,280)	664,761	671,320	544,944	194,006	1,615,704	7,297,217
2022	9,255,959	294,470	742,573	46,992	(50,561)	(329,867)	703,607	599,912	572,279	202,736	1,922,809	7,333,150
2023	9,606,620	310,315	775,989	41,994	(45,182)	(335,246)	747,870	552,079	583,844	211,859	2,260,142	7,346,478
2024	9,986,408	323,818	810,909	38,646	(41,580)	(338,848)	792,945	530,513	593,118	221,393	2,630,211	7,356,197
2025	10,397,305	337,495	847,400	37,136	(39,956)	(340,472)	841,603	520,650	620,110	231,356	3,035,719	7,361,586
2026	10,822,719	352,042	885,533	36,445	(39,213)	(341,215)	893,592	516,754	655,721	241,767	3,479,575	7,343,144
2027	11,255,374	367,349	925,382	36,173	(38,919)	(341,509)	948,476	534,206	678,377	252,647	3,964,912	7,290,462
2028	11,710,450	384,166	967,024	37,394	(40,234)	(340,194)	1,008,156	563,926	714,420	264,016	4,495,103	7,215,347
2029	12,176,847	402,186	1,010,540	39,475	(42,472)	(337,956)	1,071,773	600,360	759,442	275,897	5,073,776	7,103,071
2030	12,646,962	420,442	1,056,014	42,025	(45,216)	(335,212)	1,138,053	666,090	784,011	288,312	5,704,837	6,942,125
2031	13,143,230	439,666	1,103,535	46,626	(50,167)	(330,261)	1,209,399	756,235	817,968	301,286	6,392,488	6,750,742
2032	13,658,473	461,435	1,153,194	52,936	(56,956)	(323,472)	1,287,137	873,042	855,486	314,844	7,141,248	6,517,225
2033	14,192,931	484,535	1,205,088	61,113	(65,753)	(314,675)	1,370,308	1,045,923	868,415	329,012	7,955,979	6,236,952
2034	14,775,685	509,173	1,259,317	73,215	(78,774)	(301,654)	1,461,277	1,284,763	878,619	343,818	8,841,910	5,933,775
2035	15,414,676	534,166	1,315,986	89,933	(96,762)	(283,666)	1,559,657	1,578,852	906,278	359,290	9,804,662	5,610,014
2036	16,095,542	559,989	1,375,205	110,520	(118,911)	(261,517)	1,665,286	1,947,870	920,810	375,458	10,850,278	5,245,264
2037	16,836,153	584,867	1,437,089	136,351	(146,703)	(233,725)	1,777,879	2,381,090	952,305	392,354	11,985,255	4,850,898
2038	17,621,525	609,870	1,501,758	166,676	(179,331)	(201,097)	1,897,876	2,875,142	993,814	410,010	13,216,577	4,404,948
2039	18,444,210	632,244	1,569,337	201,260	(216,540)	(163,888)	2,022,413	3,434,474	1,034,621	428,460	14,551,747	3,892,463
2040	19,304,790	657,822	0	240,413	(258,666)	(121,762)	517,807	2,416,135	1,088,405	447,741	15,998,829	3,305,961
2041	20,195,402	683,986	0	169,129	(181,970)	(198,458)	472,687	1,262,507	1,158,426	467,889	17,566,488	2,628,914
2042	21,101,430	711,050	0	88,375	(95,085)	(285,343)	418,997	(25,292)	1,217,852	488,944	19,264,031	1,837,399
2043	22,036,251	740,561	0	(1,770)	1,904	801	741,496	(1,057,018)	1,262,276	510,946	21,101,457	934,794
2044	23,020,554	771,165	0	(73,991)	79,608	801	777,583	(1,630,783)	1,351,348	0	23,089,505	(68,951)

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	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
2013	6,460,405	221,590	499,679	94,353	(101,517)	(278,911)	435,194	1,347,897	334,325	172,188	0	6,460,405
2014	6,684,167	222,950	522,165	91,864	(98,839)	(281,589)	456,551	1,312,344	360,655	176,493	172,188	6,511,979
2015	6,972,585	226,639	545,663	88,598	(95,324)	(285,104)	480,472	1,265,679	406,185	180,905	360,734	6,611,851
2016	7,280,178	231,253	570,218	83,369	(89,699)	(290,729)	504,412	1,190,990	434,259	185,428	566,890	6,713,288
2017	7,613,071	240,906	595,878	77,382	(83,258)	(297,170)	533,738	1,105,463	450,114	190,064	792,000	6,821,071
2018	7,981,018	251,507	622,693	71,848	(77,303)	(303,125)	565,620	1,026,401	488,793	194,816	1,037,504	6,943,514
2019	8,285,792	258,227	650,714	65,325	(70,285)	(310,143)	593,838	933,221	521,449	199,686	1,304,945	6,980,847
2020	8,584,150	270,067	679,996	57,957	(62,357)	(318,071)	627,592	827,953	524,384	204,678	1,595,977	6,988,173
2021	8,912,921	282,407	710,596	52,186	(56,148)	(324,280)	664,761	745,509	544,944	209,795	1,912,373	7,000,548
2022	9,255,959	294,470	742,573	46,992	(50,561)	(329,867)	703,607	671,320	572,279	215,040	2,256,034	6,999,925
2023	9,606,620	310,315	775,989	41,994	(45,182)	(335,246)	747,870	599,912	583,844	220,416	2,628,996	6,977,624
2024	9,986,408	323,818	810,909	38,646	(41,580)	(338,848)	792,945	552,079	593,118	225,926	3,033,442	6,952,966
2025	10,397,305	337,495	847,400	37,136	(39,956)	(340,472)	841,603	530,513	620,110	231,574	3,471,709	6,925,596
2026	10,822,719	352,042	885,533	36,445	(39,213)	(341,215)	893,592	520,650	655,721	237,363	3,946,303	6,876,416
2027	11,255,374	367,349	925,382	36,173	(38,919)	(341,509)	948,476	516,754	678,377	243,297	4,459,907	6,795,467
2028	11,710,450	384,166	967,024	37,394	(40,234)	(340,194)	1,008,156	534,206	714,420	249,379	5,015,397	6,695,053
2029	12,176,847	402,186	1,010,540	39,475	(42,472)	(337,956)	1,071,773	563,926	759,442	255,613	5,615,854	6,560,993
2030	12,646,962	420,442	1,056,014	42,025	(45,216)	(335,212)	1,138,053	600,360	784,011	262,003	6,264,577	6,382,385
2031	13,143,230	439,666	1,103,535	46,626	(50,167)	(330,261)	1,209,399	666,090	817,968	268,553	6,965,100	6,178,130
2032	13,658,473	461,435	1,153,194	52,936	(56,956)	(323,472)	1,287,137	756,235	855,486	275,267	7,721,210	5,937,263
2033	14,192,931	484,535	1,205,088	61,113	(65,753)	(314,675)	1,370,308	873,042	868,415	282,149	8,536,962	5,655,969
2034	14,775,685	509,173	1,259,317	73,215	(78,774)	(301,654)	1,461,277	1,045,923	878,619	289,203	9,416,698	5,358,987
2035	15,414,676	534,166	1,315,986	89,933	(96,762)	(283,666)	1,559,657	1,284,763	906,278	296,433	10,365,070	5,049,606
2036	16,095,542	559,989	1,375,205	110,520	(118,911)	(261,517)	1,665,286	1,578,852	920,810	303,844	11,387,058	4,708,484
2037	16,836,153	584,867	1,437,089	136,351	(146,703)	(233,725)	1,777,879	1,947,870	952,305	311,440	12,487,996	4,348,157
2038	17,621,525	609,870	1,501,758	166,676	(179,331)	(201,097)	1,897,876	2,381,090	993,814	319,226	13,673,596	3,947,929
2039	18,444,210	632,244	1,569,337	201,260	(216,540)	(163,888)	2,022,413	2,875,142	1,034,621	327,207	14,949,974	3,494,236
2040	19,304,790	657,822	0	240,413	(258,666)	(121,762)	517,807	3,434,474	1,088,405	335,387	16,323,679	2,981,111
2041	20,195,402	683,986	0	169,129	(181,970)	(198,458)	472,687	2,416,135	1,158,426	343,772	17,801,724	2,393,678
2042	21,101,430	711,050	0	88,375	(95,085)	(285,343)	418,997	1,262,507	1,217,852	352,366	19,391,617	1,709,813
2043	22,036,251	740,561	0	(1,770)	1,904	801	741,496	(25,292)	1,262,276	361,175	21,101,396	934,855
2044	23,020,554	771,165	0	(73,991)	79,608	801	777,583	(1,057,018)	1,351,348	80,885	22,939,669	80,885

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 0.00% per year

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								1,347,897				
2013	6,460,405	221,590	499,679	94,353	(101,517)	(278,911)	435,194	1,312,344	334,325	223,388	0	6,460,405
2014	6,684,167	222,950	522,165	91,864	(98,839)	(281,589)	456,551	1,265,679	360,655	223,388	223,388	6,460,779
2015	6,972,585	226,639	545,663	88,598	(95,324)	(285,104)	480,472	1,190,990	406,185	223,388	462,413	6,510,172
2016	7,280,178	231,253	570,218	83,369	(89,699)	(290,729)	504,412	1,105,463	434,259	223,388	718,170	6,562,008
2017	7,613,071	240,906	595,878	77,382	(83,258)	(297,170)	533,738	1,026,401	450,114	223,388	991,830	6,621,241
2018	7,981,018	251,507	622,693	71,848	(77,303)	(303,125)	565,620	933,221	488,793	223,388	1,284,646	6,696,372
2019	8,285,792	258,227	650,714	65,325	(70,285)	(310,143)	593,838	827,953	521,449	223,388	1,597,959	6,687,833
2020	8,584,150	270,067	679,996	57,957	(62,357)	(318,071)	627,592	745,509	524,384	223,388	1,933,204	6,650,946
2021	8,912,921	282,407	710,596	52,186	(56,148)	(324,280)	664,761	671,320	544,944	223,388	2,291,916	6,621,005
2022	9,255,959	294,470	742,573	46,992	(50,561)	(329,867)	703,607	599,912	572,279	223,388	2,675,738	6,580,221
2023	9,606,620	310,315	775,989	41,994	(45,182)	(335,246)	747,870	552,079	583,844	223,388	3,086,428	6,520,192
2024	9,986,408	323,818	810,909	38,646	(41,580)	(338,848)	792,945	530,513	593,118	223,388	3,525,866	6,460,542
2025	10,397,305	337,495	847,400	37,136	(39,956)	(340,472)	841,603	520,650	620,110	223,388	3,996,065	6,401,240
2026	10,822,719	352,042	885,533	36,445	(39,213)	(341,215)	893,592	516,754	655,721	223,388	4,499,178	6,323,541
2027	11,255,374	367,349	925,382	36,173	(38,919)	(341,509)	948,476	534,206	678,377	223,388	5,037,508	6,217,866
2028	11,710,450	384,166	967,024	37,394	(40,234)	(340,194)	1,008,156	563,926	714,420	223,388	5,613,522	6,096,928
2029	12,176,847	402,186	1,010,540	39,475	(42,472)	(337,956)	1,071,773	600,360	759,442	223,388	6,229,857	5,946,990
2030	12,646,962	420,442	1,056,014	42,025	(45,216)	(335,212)	1,138,053	666,090	784,011	223,388	6,889,335	5,757,627
2031	13,143,230	439,666	1,103,535	46,626	(50,167)	(330,261)	1,209,399	756,235	817,968	223,388	7,594,976	5,548,254
2032	13,658,473	461,435	1,153,194	52,936	(56,956)	(323,472)	1,287,137	873,042	855,486	223,388	8,350,012	5,308,461
2033	14,192,931	484,535	1,205,088	61,113	(65,753)	(314,675)	1,370,308	1,045,923	868,415	223,388	9,157,901	5,035,030
2034	14,775,685	509,173	1,259,317	73,215	(78,774)	(301,654)	1,461,277	1,284,763	878,619	223,388	10,022,342	4,753,343
2035	15,414,676	534,166	1,315,986	89,933	(96,762)	(283,666)	1,559,657	1,578,852	906,278	223,388	10,947,294	4,467,382
2036	16,095,542	559,989	1,375,205	110,520	(118,911)	(261,517)	1,665,286	1,947,870	920,810	223,388	11,936,993	4,158,549
2037	16,836,153	584,867	1,437,089	136,351	(146,703)	(233,725)	1,777,879	2,381,090	952,305	223,388	12,995,971	3,840,182
2038	17,621,525	609,870	1,501,758	166,676	(179,331)	(201,097)	1,897,876	2,875,142	993,814	223,388	14,129,077	3,492,448
2039	18,444,210	632,244	1,569,337	201,260	(216,540)	(163,888)	2,022,413	3,434,474	1,034,621	223,388	15,341,500	3,102,710
2040	19,304,790	657,822	0	240,413	(258,666)	(121,762)	517,807	2,416,135	1,088,405	223,388	16,638,793	2,665,997
2041	20,195,402	683,986	0	169,129	(181,970)	(198,458)	472,687	1,262,507	1,158,426	223,388	18,026,897	2,168,505
2042	21,101,430	711,050	0	88,375	(95,085)	(285,343)	418,997	(25,292)	1,217,852	223,388	19,512,168	1,589,262
2043	22,036,251	740,561	0	(1,770)	1,904	801	741,496	(1,057,018)	1,262,276	223,388	21,101,408	934,843
2044	23,020,554	771,165	0	(73,991)	79,608	801	777,583	(1,630,783)	1,351,348	218,659	22,801,895	218,659

EXHIBIT E

GLOSSARY

Accrual Accounting - A system of accounting in which revenues are recorded when earned and outlays are recorded when goods are received or services performed, even though the actual receipt of revenues and payment for goods or services may occur, in whole or in part, at a different time.

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."

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."

EXHIBIT E

GLOSSARY

(continued)

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.

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.

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.

EXHIBIT E

GLOSSARY

(continued)

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.