

**Town of Norton Other
Postemployment Benefits Plan**

GASB 45 Actuarial Valuation

as of

July 1, 2011

For the fiscal years ending

June 30, 2012

June 30, 2013

Delivered August 2012

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August 10, 2012

Personal and Confidential

Mr. James Puello
Town Accountant
Town of Norton
70 E. Main Street
Norton, MA 02766

Dear Mr. Puello:

We have performed an actuarial valuation of the Town of Norton Other Postemployment Benefits Plan for the fiscal year ending June 30, 2012. The figures presented in this report reflect the adoption, by the Town of Norton, of Statement No. 45 of the Governmental Accounting Standards Board ("GASB 45") effective July 1, 2007.

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

	<u>July 1, 2011</u>	<u>July 1, 2009</u>
I. Present Value of Future Benefits		
A. Actives	45,888,496	37,716,562
B. Retirees/Disabled	<u>29,813,496</u>	<u>31,187,902</u>
C. Total	75,701,992	68,904,464
II. Present Value of Future Normal Cost	24,347,345	18,274,528
III. Actuarial Accrued Liability (Projected Unit Credit)		
A. Actives	21,541,151	19,442,034
B. Retirees/Disabled	<u>29,813,496</u>	<u>31,187,902</u>
C. Total	51,354,647	50,629,936
IV. Plan Assets	1,000	0
V. Unfunded Actuarial Accrued Liability ("UAAL")	51,353,647	50,629,936
VI. Funded Ratio	0.00%	0.00%
VII. Annual Covered Payroll	22,909,558	N/A
VIII. UAAL as % of Covered Payroll	224.20%	N/A
IX. Net OPEB Obligation	8,273,565	4,592,376
X. Number of Covered Participants		
A. Actives	433	391
B. Retirees/Disabled	<u>326</u>	<u>284</u>
C. Total	759	675
For the Fiscal Year Ending:	<u>June 30, 2012</u>	<u>June 30, 2010</u>
XI. Normal Cost	1,786,821	1,469,192
XII. Amortization of UAAL - 30 year flat dollar	1,994,323	2,191,474
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	3,781,144	3,660,666
XIV. Interest on Net OPEB Obligation	330,942	183,695
XV. Adjustment to Annual Required Contribution	(715,513)	(265,002)
XVI. Amortization of Actuarial (Gains) / Losses	454,389	0
XVII. Annual OPEB Cost [XIII. + XIV. + XV. + XVI.]	3,850,962	3,579,359
XVIII. Expected Employer Contribution	1,851,008	1,678,298
XIX. Percentage of Annual OPEB Cost Contributed	48.1%	46.9%
XX. Net OPEB Obligation at Beginning of Year (IX.)	8,273,565	4,592,376
XXI. Increase in Net OPEB Obligations (XVII. - XVIII.)	1,999,954	1,901,061
XXII. Net OPEB Obligation at End of Year (XX. + XXI.)	10,273,519	6,493,437
XXIII. Discount Rate	4.00%	4.00%

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Norton
Assuming Pay-as-you-go funding - 4.00% discount rate
Plan Liabilities as of July 1, 2011

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Present Value of Future Benefits				
A. Actives	45,793,949	0	94,547	45,888,496
B. Retirees/Disabled	<u>29,670,974</u>	<u>0</u>	<u>142,522</u>	<u>29,813,496</u>
C. Total	75,464,923	0	237,069	75,701,992
II. Present Value of Future Normal Cost	24,305,619	0	41,726	24,347,345
III. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	21,488,330	0	52,821	21,541,151
B. Retirees/Disabled	<u>29,670,974</u>	<u>0</u>	<u>142,522</u>	<u>29,813,496</u>
C. Total	51,159,304	0	195,343	51,354,647
IV. Plan Assets	996	0	4	1,000
V. Unfunded Actuarial Accrued Liability ("UAAL")	51,158,308	0	195,339	51,353,647
VI. Annual Covered Payroll	22,909,558	22,909,558	22,909,558	22,909,558
VII. UAAL as % of Covered Payroll	223.3%	0.0%	0.9%	224.2%
VIII. Net OPEB Obligation	8,242,094	0	31,471	8,273,565
IX. Number of Covered Participants				
A. Actives	433	10	433	
B. Retirees/Disabled	<u>326</u>	<u>0</u>	<u>170</u>	
C. Total	759	10	603	
 For Fiscal Year Ending June 30, 2012				
X. Normal Cost	1,782,929	0	3,892	1,786,821
XI. Amortization of UAAL - 30 year flat dollar	1,986,737	0	7,586	1,994,323
XII. Annual Required Contribution ('ARC') [X. + XI.]	3,769,666	0	11,478	3,781,144
XIII. Interest on Net OPEB Obligation	329,684	0	1,258	330,942
XIV. Adjustment to Annual Required Contribution	(712,792)	0	(2,721)	(715,513)
XV. Amortization of Actuarial (Gains) / Losses	452,661	0	1,728	454,389
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	3,839,219	0	11,743	3,850,962
XVII. Expected Employer Contribution	1,844,944	0	6,064	1,851,008
XVIII. Contribution to Trust Fund	0	0	0	0
XIX. Total Employer Contribution	1,844,944	0	6,064	1,851,008
XVIII. Percentage of Annual OPEB Cost Contributed	48.1%	0.0%	51.6%	48.1%
XIX. Net OPEB Obligation at Beginning of Year (VIII.)	8,242,094	0	31,471	8,273,565
XX. Increase in Net OPEB Obligations (XVI. - XVII.)	1,994,275	0	5,679	1,999,954
XXI. Net OPEB Obligation at End of Year (XIX. + XX.)	10,236,369	0	37,150	10,273,519

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Norton
Plan Liabilities as of July 1, 2011 assuming pay-as-you-go

	City Government Employees and Retirees	Sewer Employees and Retirees	Water Employees and Retirees	Total
I. Present Value of Future Benefits				
A. Actives	44,301,616	236,962	1,349,918	45,888,496
B. Retirees/Disabled	<u>29,681,229</u>	<u>0</u>	<u>132,267</u>	<u>29,813,496</u>
C. Total	73,982,845	236,962	1,482,185	75,701,992
II. Present Value of Future Normal Cost	23,640,100	150,853	556,392	24,347,345
III. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	20,661,516	86,109	793,526	21,541,151
B. Retirees/Disabled	<u>29,681,229</u>	<u>0</u>	<u>132,267</u>	<u>29,813,496</u>
C. Total	50,342,745	86,109	925,793	51,354,647
IV. Plan Assets	980	2	18	1,000
V. Unfunded Actuarial Accrued Liability ("UAAL")	50,341,765	86,107	925,775	51,353,647
VI. Annual Covered Payroll	22,245,060	97,136	567,362	22,909,558
VII. UAAL as % of Covered Payroll	226.3%	88.6%	163.2%	224.2%
VIII. Net OPEB Obligation	8,110,540	13,873	149,152	8,273,565
IX. Number of Covered Participants				
A. Actives	420	2	11	433
B. Retirees/Disabled	<u>324</u>	<u>0</u>	<u>2</u>	<u>326</u>
C. Total	744	2	13	759
For Fiscal Year Ending June 30, 2012				
X. Normal Cost	1,725,029	8,885	52,907	1,786,821
XI. Amortization of UAAL - 30 year flat dollar	1,955,381	3,325	35,617	1,994,323
XII. Annual Required Contribution ("ARC") [X. + XI.]	3,680,410	12,210	88,524	3,781,144
XIII. Interest on Net OPEB Obligation	324,421	555	5,966	330,942
XIV. Adjustment to Annual Required Contribution	(701,414)	(1,200)	(12,899)	(715,513)
XV. Amortization of Actuarial (Gains) / Losses	445,435	762	8,192	454,389
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	3,748,852	12,327	89,783	3,850,962
XVII. Expected Employer Contribution	1,835,063	0	15,945	1,851,008
XVIII. Contribution to Trust Fund	0	0	0	0
XIX. Total Employer Contribution	1,835,063	0	15,945	1,851,008
XX. Percentage of Annual OPEB Cost Contributed	48.9%	0.0%	17.8%	48.1%
XXI. Net OPEB Obligation at Beginning of Year (VIII.)	8,110,540	13,873	149,152	8,273,565

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Norton
Detail of Plan Liabilities by Group and Dependency Status
Assuming Pay-as-you-go funding - 4.00% discount rate
Plan Liabilities as of July 1, 2011

	<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	6,608,547	3,196,832	267,201
B. Spouses	<u>4,906,038</u>	<u>2,376,355</u>	<u>190,195</u>
C. Total	11,514,585	5,573,187	457,396
Age 65 and Over			
A. Participants	19,318,679	8,949,634	748,400
B. Spouses	<u>15,055,232</u>	<u>7,018,330</u>	<u>581,025</u>
C. Total	34,373,911	15,967,964	1,329,425
Actives Total			
A. Participants	25,927,226	12,146,466	1,015,601
B. Spouses	<u>19,961,270</u>	<u>9,394,685</u>	<u>771,220</u>
C. Total	45,888,496	21,541,151	1,786,821
Retirees/Disabled			
Under Age 65			
A. Participants	3,506,306	3,506,306	0
B. Spouses	<u>1,333,942</u>	<u>1,333,942</u>	<u>0</u>
C. Total	4,840,248	4,840,248	0
Age 65 and Over			
A. Participants	22,228,810	22,228,810	<u>0</u>
B. Spouses	<u>2,744,438</u>	<u>2,744,438</u>	<u>0</u>
C. Total	24,973,248	24,973,248	0
Retirees/Disabled Total			
A. Participants	25,735,116	25,735,116	0
B. Spouses	<u>4,078,380</u>	<u>4,078,380</u>	<u>0</u>
C. Total	29,813,496	29,813,496	0
Total Population			
A. Participants	51,662,342	37,881,582	1,015,601
B. Spouses	<u>24,039,650</u>	<u>13,473,065</u>	<u>771,220</u>
C. Total	75,701,992	51,354,647	1,786,821

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Norton
Assuming Plan Funding - 7.00% discount rate
Plan Liabilities as of July 1, 2011

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Present Value of Future Benefits				
A. Actives	22,585,618	0	44,366	22,629,984
B. Retirees/Disabled	<u>22,034,115</u>	<u>0</u>	<u>101,685</u>	<u>22,135,800</u>
C. Total	44,619,733	0	146,051	44,765,784
II. Present Value of Future Normal Cost	10,724,966	0	17,336	10,742,302
III. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	11,860,652	0	27,030	11,887,682
B. Retirees/Disabled	<u>22,034,115</u>	<u>0</u>	<u>101,685</u>	<u>22,135,800</u>
C. Total	33,894,767	0	128,715	34,023,482
IV. Plan Assets	996	0	4	1,000
V. Unfunded Actuarial Accrued Liability ("UAAL")	33,893,771	0	128,711	34,022,482
VI. Annual Covered Payroll	22,909,558	22,909,558	22,909,558	22,909,558
VII. UAAL as % of Covered Payroll	147.9%	0.0%	0.6%	148.5%
VIII. Net OPEB Obligation	8,242,094	0	31,471	8,273,565
IX. Number of Covered Participants				
A. Actives	433	10	433	
B. Retirees/Disabled	<u>326</u>	<u>0</u>	<u>170</u>	
C. Total	759	10	603	

For Fiscal Year Ending June 30, 2012

X. Normal Cost	920,278	0	1,868	922,146
XI. Amortization of UAAL - 30 year flat dollar	2,544,452	0	9,663	2,554,115
XII. Annual Required Contribution ('ARC') [X. + XI.]	3,464,730	0	11,531	3,476,261
XIII. Interest on Net OPEB Obligation	576,947	0	2,203	579,150
XIV. Adjustment to Annual Required Contribution	(845,736)	0	(3,229)	(848,965)
XV. Amortization of Actuarial (Gains) / Losses	(1,318,884)	0	(5,109)	(1,323,993)
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	1,877,057	0	5,396	1,882,453
XVII. Expected Employer Contribution	1,844,944	0	6,064	1,851,008
XVIII. Contribution to Trust Fund	1,285,115	0	(668)	1,284,447
XIX. Total Employer Contribution	3,130,059	0	5,396	3,135,455
XX. Percentage of Annual OPEB Cost Contributed	166.8%	0.0%	100.0%	166.6%
XXI. Net OPEB Obligation at Beginning of Year (VIII.)	8,242,094	0	31,471	8,273,565
XXII. Increase in Net OPEB Obligations (XVI. - XVII.)	(1,253,002)	0	0	(1,253,002)
XXIII. Net OPEB Obligation at End of Year (XXI. + XXII.)	6,989,092	0	31,471	7,020,563

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Norton
Plan Liabilities as of July 1, 2011 assuming funding 100% of the annual OPEB costs

	City Government Employees and Retirees	Sewer Employees and Retirees	Water Employees and Retirees	Total
I. Present Value of Future Benefits				
A. Actives	21,847,412	116,858	665,714	22,629,984
B. Retirees/Disabled	<u>21,901,767</u>	<u>23,268</u>	<u>210,765</u>	<u>22,135,800</u>
C. Total	43,749,179	140,126	876,479	44,765,784
II. Present Value of Future Normal Cost	10,430,258	66,558	245,486	10,742,302
III. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	11,402,247	47,520	437,915	11,887,682
B. Retirees/Disabled	<u>21,950,830</u>	<u>9,529</u>	<u>175,441</u>	<u>22,135,800</u>
C. Total	33,353,077	57,049	613,356	34,023,482
IV. Plan Assets	980	2	18	1,000
V. Unfunded Actuarial Accrued Liability ("UAAL")	33,352,097	57,047	613,338	34,022,482
VI. Annual Covered Payroll	22,245,060	97,136	567,362	22,909,558
VII. UAAL as % of Covered Payroll	149.9%	58.7%	108.1%	148.5%
VIII. Net OPEB Obligation	8,110,540	13,873	149,152	8,273,565
IX. Number of Covered Participants				
A. Actives	420	2	11	433
B. Retirees/Disabled	<u>324</u>	<u>0</u>	<u>2</u>	<u>326</u>
C. Total	744	2	13	759
For Fiscal Year Ending June 30, 2012				
X. Normal Cost	890,257	4,585	27,304	922,146
XI. Amortization of UAAL - 30 year flat dollar	2,504,243	4,258	45,614	2,554,115
XII. Annual Required Contribution ('ARC') [X. + XI.]	3,394,500	8,843	72,918	3,476,261
XIII. Interest on Net OPEB Obligation	567,738	971	10,441	579,150
XIV. Adjustment to Annual Required Contribution	(832,236)	(1,424)	(15,305)	(848,965)
XV. Amortization of Actuarial (Gains) / Losses	(1,297,903)	(2,220)	(23,870)	(1,323,993)
XVI. Annual OPEB Cost [XII. + XIII. + XIV. + XV.]	1,832,099	6,170	44,184	1,882,453
XVII. Expected Employer Contribution	1,835,063	0	15,945	1,851,008
XVIII. Contribution to Trust Fund	1,282,293	2,154	28,239	1,284,447
XIX. Total Employer Contribution	3,117,356	2,154	44,184	3,135,455
XX. Percentage of Annual OPEB Cost Contributed	170.2%	34.9%	100.0%	166.6%
XXI. Net OPEB Obligation at Beginning of Year (VIII.)	8,110,540	13,873	149,152	8,273,565

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 5-30 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, 2008. 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 and a flat dollar amortization of the Unfunded Actuarial Accrued Liability at transition. This approach yields an amortization charge of \$1,994,323. 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 2012 fiscal year is \$1,786,821. The combined amortization charge and normal cost represent the Annual Required Contribution (“ARC”) for the plan for the 2012 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 2012 fiscal year beyond the “pay-as-you-go” costs is \$1,999,954.

2. Plan Experience:

Plan experience was slightly more favorable than expected. This is mainly due to lower than expected increases for the Medicare medical plans. The actuarial experience gain is amortized into the annual OPEB costs over a 15-year period (the segment of the actuarial loss reflecting OPEB costs in excess of employer contributions is offset by the ARC Adjustment). The net impact of the plan experience is a modest increase in the annual OPEB cost.

SECTION II
SUMMARY OF PLAN PROVISIONS

<u>Effective Date</u>	July 1, 2007; GASB 45 is adopted.
<u>Plan Year</u>	July 1 through June 30.
<u>Eligibility</u>	An employee 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.
<u>Credited Service</u>	Elapsed time from date of hire to termination of service date.
<u>Participant Contributions</u>	Premiums for Medical and Life insurance are 25% of underlying gross premium. Retirees shall pay 100% for dental coverage.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Blue Cross Blue Shield of Massachusetts as well as Group Term Life Insurance. Retirees can purchase Dental Insurance via DMS or Altus Dental by paying 100% of the premiums.
<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 15 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 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 Safety Male</u>	<u>Non Public</u>	
		<u>Safety Female</u>	<u>Public Safety</u>
0	15.00%	15.00%	1.50%
5	10.20%	10.20%	1.50%
10	5.40%	5.40%	1.50%
15	3.70%	3.70%	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

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 2008	11.0%	8.5%
FY 2009	10.0%	8.0%
FY 2010	9.0%	7.5%
FY 2011	8.0%	7.0%
FY 2012	7.0%	6.5%
FY 2013	6.0%	6.0%
FY 2014	5.0%	5.5%
FY 2015	5.0%	5.0%

Participation Rate

It was assumed that 80% of the employees eligible to receive retirement benefits would enroll in the retiree medical and dental plans upon retirement. For life insurance plans, it was assumed that 80% of eligible employees would elect coverage upon retirement.

Percent Married

It was assumed that 80% of the 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			
	Single	Two-Person	Family	Total
BCBS Network Blue HMO	129		282	411
BCBS HMO Blue Value	2		2	4
BCBS Blue Care Elect PPO	21		10	31
Medex	79			79
Managed Blue for Seniors	149			149
Total	380	0	294	674

	Per Contract Costs (monthly) - FY 2013		
	Single	Two-Person	Family
BCBS Network Blue HMO	664.39	0.00	1,740.55
BCBS HMO Blue Value	603.82	0.00	1,582.07
BCBS Blue Care Elect PPO	1,001.51	0.00	2,489.96
Medex	412.65	825.30	
Managed Blue for Seniors	392.49	784.98	

Gross Expected FY 2013 Incurred Premiums	8,615,098
Adjustment to reflect children's claims	(1,460,849)
Total Expected FY 2013 Incurred Premiums (adults only)	7,154,250

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2011)

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

1. A DESCRIPTION OF THE RETIREE MEDICAL INSURANCE PROGRAM:

- a. Plan Type: Various Medical Insurance offerings via the Blue Cross Blue Shield of Massachusetts
- b. Administrator: Town of Norton
- c. Eligibility: An employee 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.
- d. Cost Sharing: 25% of premiums

2. A DESCRIPTION OF THE DENTAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Dental via Altus Dental & DMS
- b. Administrator: Town of Norton
- c. Eligibility: Same as above
- d. Cost sharing: 100% of premiums

3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

- a. Plan Type: Group Term Life Insurance - \$2,000.
- b. Administrator: Town of Norton
- c. Eligibility: Same as above
- d. Cost sharing: 25% of premiums

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2011)
(continued)

4. RETIREE MEDICAL, DENTAL AND LIFE INSURANCE CONTRIBUTIONS:

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

5. FUNDING POLICY

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town expects to contribute \$0 beyond the pay-as-you-go. For the 2012 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$1,851,008.

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2011)
(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	\$3,781,144
Interest on net OPEB obligation	\$330,942
Adjustment to annual required contribution	(\$715,513)
Amortization of Actuarial (Gains) / Losses	\$454,389
Annual OPEB cost (expense)	\$3,850,962
Contributions made	\$1,851,008
Increase in net OPEB obligation	\$1,999,954
Net OPEB Obligation – beginning of year	\$8,273,565
Net OPEB Obligation – end of year	\$10,273,519

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2011)

(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 2012 fiscal year and the three preceding years were as follows:

Fiscal Year Ended	Annual OPEB Cost	Expected Employer Payments	Increase in OPEB Obligation
06/30/2009	\$3,435,238	\$1,266,573	\$2,168,665
06/30/2010	\$3,579,359	\$1,678,298	\$1,901,061
06/30/2011	\$3,540,312	\$1,760,184	\$1,780,128
06/30/2012	\$3,850,962	\$1,851,008	\$1,999,954
06/30/2013 (est.)	\$4,112,134	\$1,955,361	\$2,156,773
06/30/2014 (est.)	\$4,326,069	\$1,998,401	\$2,327,668

Schedule of Funding Progress:

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
07/01/2008	\$0	\$36,364,614	\$36,364,614	0.0%	N/A	N/A
07/01/2009	\$0	\$50,629,936	\$50,629,936	0.0%	N/A	N/A
07/01/2010	\$0	\$52,437,664	\$52,437,664	0.0%	N/A	N/A
07/01/2011	\$1,000	\$51,354,647	\$51,353,647	0.0%	\$22,909,558	224.20%
07/01/2012 (est.)	\$1,000	\$53,342,080	\$53,341,080	0.0%	\$23,596,845	226.05%
07/01/2013 (est.)	\$1,040	\$55,488,901	\$55,487,861	0.0%	\$24,304,750	228.30%

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2011)
(continued)

Fiscal Year Ending June 30, 2012				
	<u>City Government Employees and Retirees</u>	<u>Sewer Employees and Retirees</u>	<u>Water Employees and Retirees</u>	<u>Total</u>
OPEB obligation at beginning of year	8,110,540	13,873	149,152	8,273,565
Annual OPEB Cost	3,748,852	12,327	89,783	3,850,962
Expected Employer Payments	1,835,063	-	15,945	1,851,008
Increase in OPEB Obligation	1,913,789	12,327	73,838	1,999,954
OPEB obligation at end of year	10,024,329	26,200	222,990	10,273,519
APBO at beginning of year	50,342,745	86,109	925,793	51,354,647

Fiscal Year Ending June 30, 2013				
	<u>City Government Employees and Retirees</u>	<u>Sewer Employees and Retirees</u>	<u>Water Employees and Retirees</u>	<u>Total</u>
OPEB obligation at beginning of year	10,024,329	26,200	222,990	10,273,519
Annual OPEB Cost	4,003,099	13,163	95,872	4,112,134
Expected Employer Payments	1,938,517	-	16,844	1,955,361
Increase in OPEB Obligation	2,064,582	13,163	79,028	2,156,773
OPEB obligation at end of year	12,088,911	39,363	302,018	12,430,292
APBO at beginning of year	52,291,017	89,441	961,621	53,342,080

Fiscal Year Ending June 30, 2014				
	<u>City Government Employees and Retirees</u>	<u>Sewer Employees and Retirees</u>	<u>Water Employees and Retirees</u>	<u>Total</u>
OPEB obligation at beginning of year	12,088,911	39,363	302,018	12,430,292
Annual OPEB Cost	4,211,361	13,848	100,860	4,326,069
Expected Employer Payments	1,981,186	-	17,215	1,998,401
Increase in OPEB Obligation	2,230,175	13,848	83,645	2,327,668
OPEB obligation at end of year	14,319,086	53,211	385,663	14,757,960
APBO at beginning of year	54,395,537	93,041	1,000,323	55,488,901

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2011)

(continued)

7. FUNDED STATUS AND FUNDING PROGRESS

As of July 1, 2011, the most recent valuation date, the plan was 0.00% funded. The actuarial liability for benefits was \$51,354,647, and the actuarial value of assets was \$1,000, resulting in an unfunded actuarial accrued liability (UAAL) of \$51,353,647. The covered payroll (annual payroll of active employees covered by the plan) was \$ 22,909,558 and the ratio of the UAAL to the covered payroll was 224.2%.

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 \$63,252,898 or by 23.2% and the corresponding Normal Cost would increase to \$2,453,974 or by 37.3%. 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 \$41,921,827 or by 18.4% and the corresponding Normal Cost would decrease to \$1,290,064 or by 27.8%.

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2011)
(continued)

9. ACTUARIAL METHODS AND ASSUMPTIONS

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

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

<u>Year</u>	<u>Medical</u>	<u>Dental</u>
FY 2008	11.0%	8.5%
FY 2009	10.0%	8.0%
FY 2010	9.0%	7.5%
FY 2011	8.0%	7.0%
FY 2012	7.0%	6.5%
FY 2013	6.0%	6.0%
FY 2014	5.0%	5.5%
FY 2015	5.0%	5.0%

General Inflation Assumption: 2.50% per annum
Annual Compensation Increases: 3.00% per annum
Actuarial Value of Assets: Market Value
Amortization of UAAL: Level dollar amortization over 30 years at transition
Remaining Amortization Period: 26 years at July 1, 2011

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2011)

(continued)

10. Remaining Amortization Bases

The initial Actuarial Accrued Liability as of the date GASB 45 was adopted is amortized as a component of the Annual Required Contribution ("ARC"). The Unfunded Actuarial Accrued Liability at transition was amortized over a 30 year period and a flat dollar amortization of the Unfunded Actuarial Accrued Liability at transition. For years subsequent to the initial adoption of GASB 45, cumulative gains/losses are amortized on a level dollar basis over a 15 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	50,629,936
2. Actuarial Value of Assets at prior valuation date	<u>0</u>
3. Unfunded Actuarial Accrued Liability at prior valuation date [1. - 2.]	50,629,936
4. Normal Cost for prior periods	2,938,384
5. Employer Contributions for prior periods	(3,438,482)
6. Interest to current valuation date	<u>4,243,218</u>
7. Expected Actuarial Accrued Liability [3. + 4. + 5. + 6.]	54,373,056

Actual Unfunded Actuarial Liability

8. Actuarial Accrued Liability at current valuation date	51,354,647
9. Actuarial Value of Assets at current valuation date	<u>1,000</u>
10. Unfunded Actuarial Accrued Liability at current valuation date [8. - 9.]	51,353,647

Net Actuarial (Gain) / Loss from Plan Experience [10. - 7.] **(3,019,409)**

Contribution Deficiency or (Excess Contributions) 8,273,565

Total (Gain) or Loss to be amortized 5,254,156

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2011)
(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, 2007	GASB 45 Adoption	34,468,501	30	32,318,697	26	1,994,323
July 1, 2011	Adjustment to ARC	(8,273,565)	15	(8,273,565)	15	(715,513)
July 1, 2011	Cumulative (Gain) / Loss	5,254,156	15	5,254,156	15	454,389
Total				29,299,288		1,733,199

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, Town of Norton has established an irrevocable trust for the purposes of prefunding liabilities under GASB 45.

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2011)

(continued)

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

EXHIBIT B

Reconciliation of Plan Participation
(As of July 1, 2011)

ACTIVE EMPLOYEES

	<u>July 1, 2011</u>	<u>July 1, 2009</u>
A. Average Age at Hire	34.54	35.81
B. Average Service	10.58	9.19
C. Average Current Age	45.12	45.00

EXHIBIT C

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

Total Medical, Dental & 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")
								8,273,565				
2012	51,354,647	1,786,821	1,994,323	330,942	(715,513)	454,389	3,850,962	10,273,519	1,851,008	0	1,000	51,353,647
2013	53,342,080	1,967,994	1,994,323	410,941	(888,473)	627,349	4,112,134	12,430,292	1,955,361	0	1,000	53,341,080
2014	55,488,901	2,095,658	1,994,323	497,212	(1,074,995)	813,871	4,326,069	14,757,960	1,998,401	0	1,040	55,487,861
2015	57,809,604	2,224,521	1,994,323	590,318	(1,276,295)	1,015,171	4,548,038	17,271,623	2,034,375	0	1,082	57,808,522
2016	60,320,726	2,359,592	1,994,323	690,865	(1,493,681)	1,232,557	4,783,656	19,905,114	2,150,165	0	1,125	60,319,601
2017	62,951,360	2,497,567	1,994,323	796,204	(1,721,430)	1,460,306	5,026,970	22,716,217	2,215,867	0	1,170	62,950,190
2018	65,763,312	2,650,326	1,994,323	908,649	(1,964,540)	1,703,416	5,292,174	25,689,699	2,318,692	0	1,217	65,762,095
2019	68,739,022	2,806,467	1,994,323	1,027,588	(2,221,692)	1,960,568	5,567,254	28,820,694	2,436,259	0	1,266	68,737,756
2020	71,873,598	2,974,098	1,994,323	1,152,828	(2,492,466)	2,231,342	5,860,125	32,131,972	2,548,847	0	1,317	71,872,281
2021	75,190,803	3,155,308	1,994,323	1,285,278	(2,778,832)	2,517,708	6,173,785	35,603,044	2,702,713	0	1,370	75,189,433
2022	78,669,135	3,339,611	1,994,323	1,424,122	(3,079,016)	2,817,892	6,496,932	39,252,059	2,847,917	0	1,425	78,667,710
2023	82,327,261	3,483,601	1,994,323	1,570,082	(3,394,590)	3,133,466	6,786,882	43,033,415	3,005,526	0	1,482	82,325,779
2024	86,117,550	3,657,674	1,994,323	1,721,336	(3,721,609)	3,460,485	7,112,209	46,956,787	3,188,837	0	1,541	86,116,009
2025	90,050,509	3,842,341	1,994,323	1,878,271	(4,060,909)	3,799,785	7,453,811	51,004,761	3,405,837	0	1,603	90,048,906
2026	94,106,495	4,038,421	1,994,323	2,040,191	(4,410,985)	4,149,861	7,811,811	55,236,200	3,580,372	0	1,667	94,104,828
2027	98,347,124	4,248,897	1,994,323	2,209,448	(4,776,928)	4,776,928	8,452,668	59,881,154	3,807,714	0	1,734	98,345,390
2028	102,739,839	4,464,810	1,994,323	2,395,247	(5,178,632)	5,178,632	8,854,380	64,685,257	4,050,277	0	1,803	102,738,036
2029	107,280,546	4,701,326	1,994,323	2,587,411	(5,594,100)	5,594,100	9,283,060	69,699,544	4,268,773	0	1,875	107,278,671
2030	112,021,917	4,946,393	1,994,323	2,787,982	(6,027,744)	6,027,744	9,728,698	74,935,912	4,492,330	0	1,950	112,019,967
2031	116,975,621	5,201,850	1,994,323	2,997,436	(6,480,595)	6,480,595	10,193,609	80,386,721	4,742,800	0	2,028	116,973,593
2032	122,132,057	5,477,437	1,994,323	3,215,469	(6,951,991)	6,951,991	10,687,229	86,072,214	5,001,736	0	2,109	122,129,948
2033	127,512,620	5,763,156	1,994,323	3,442,888	(7,443,682)	7,443,682	11,200,367	92,028,577	5,244,004	0	2,193	127,510,427
2034	133,153,044	6,061,953	1,994,323	3,681,143	(7,958,800)	7,958,800	11,737,419	98,261,389	5,504,607	0	2,281	133,150,763
2035	139,058,890	6,372,384	1,994,323	3,930,455	(8,497,824)	8,497,824	12,297,162	104,795,391	5,763,160	0	2,372	139,056,518
2036	145,254,839	6,704,182	1,994,323	4,191,816	(9,062,897)	9,062,897	12,890,321	111,652,143	6,033,569	0	2,467	145,252,372
2037	151,762,564	7,054,003	1,994,323	4,466,085	(9,655,881)	9,655,881	13,514,411	118,864,546	6,302,008	0	2,566	151,759,998
2038	158,615,418	7,421,829	0	4,754,581	(10,279,623)	10,279,623	12,176,410	124,481,125	6,559,831	0	2,669	158,612,749
2039	165,856,512	7,813,188	0	4,979,245	(10,765,355)	10,765,355	12,792,433	130,443,280	6,830,278	0	2,776	165,853,736
2040	173,513,171	8,219,638	0	5,217,731	(11,280,973)	11,280,973	13,437,369	136,754,232	7,126,417	0	2,887	173,510,284
2041	181,590,927	8,654,248	0	5,470,170	(11,826,756)	11,826,756	14,124,418	143,480,809	7,397,841	0	3,002	181,587,925
2042	190,161,578	9,113,642	0	5,739,233	(12,408,482)	12,408,482	14,852,875	150,586,987	7,746,697	0	3,122	190,158,456
2043	199,189,662	9,593,613	0	6,023,480	(13,023,038)	13,023,038	15,617,093	158,114,885	8,089,195	0	3,247	199,186,415

EXHIBIT D

Projected Cash Flows (Open Group) - Funded Approach

Total Medical, Dental & Life Insurance - Funding at 7.00% discount rate												
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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")
								8,273,565				
2012	34,023,482	922,146	2,554,115	579,150	(848,965)	(1,323,993)	1,882,453	7,020,563	1,851,007	1,284,448	1,000	34,022,482
2013	35,411,242	1,016,954	2,554,115	491,439	(720,392)	(1,452,566)	1,889,550	5,670,304	1,955,361	1,284,448	1,000	35,410,242
2014	36,885,935	1,090,088	2,554,115	396,921	(581,840)	(1,591,118)	1,868,166	4,255,621	1,998,401	1,284,448	1,285,518	35,600,417
2015	38,496,055	1,164,256	2,554,115	297,894	(436,677)	(1,736,281)	1,843,307	2,780,105	2,034,375	1,284,448	2,659,952	35,836,103
2016	40,260,502	1,240,224	2,554,115	194,607	(285,271)	(1,887,687)	1,815,988	1,161,480	2,150,165	1,284,448	4,130,597	36,129,905
2017	42,105,100	1,318,857	2,554,115	81,304	(119,181)	(2,053,777)	1,781,318	(557,517)	2,215,867	1,284,448	5,704,187	36,400,913
2018	44,093,382	1,406,119	2,554,115	(39,026)	57,208	(2,169,729)	1,808,687	(2,351,970)	2,318,692	1,284,448	7,387,928	36,705,454
2019	46,203,677	1,496,876	2,554,115	(164,638)	241,340	(2,169,729)	1,957,964	(4,114,713)	2,436,259	1,284,448	9,189,531	37,014,146
2020	48,432,794	1,595,154	2,554,115	(288,030)	422,218	(2,169,729)	2,113,728	(5,834,280)	2,548,847	1,284,448	11,117,246	37,315,548
2021	50,802,638	1,702,436	2,554,115	(408,400)	598,666	(2,169,729)	2,277,088	(7,544,353)	2,702,713	1,284,448	13,179,901	37,622,737
2022	53,288,527	1,811,452	2,554,115	(528,105)	774,140	(2,169,729)	2,441,873	(9,234,845)	2,847,917	1,284,448	15,386,942	37,901,585
2023	55,909,706	1,888,333	2,554,115	(646,439)	947,604	(2,169,729)	2,573,884	(10,950,935)	3,005,526	1,284,448	17,748,476	38,161,230
2024	58,627,988	1,981,906	2,554,115	(766,565)	1,123,695	(2,169,729)	2,723,422	(12,700,798)	3,188,837	1,284,448	20,275,317	38,352,671
2025	61,441,051	2,081,368	2,554,115	(889,056)	1,303,252	(2,169,729)	2,879,950	(14,511,133)	3,405,837	1,284,448	22,979,037	38,462,014
2026	64,324,743	2,186,947	2,554,115	(1,015,779)	1,489,014	(2,169,729)	3,044,568	(16,331,385)	3,580,372	1,284,448	25,872,018	38,452,725
2027	67,336,510	2,300,629	2,554,115	(1,143,197)	1,675,793	3,229	5,390,569	(16,032,978)	3,807,714	1,284,448	28,967,507	38,369,003
2028	70,437,484	2,415,854	2,554,115	(1,122,308)	1,645,173	3,229	5,496,063	(15,871,640)	4,050,277	1,284,448	32,279,680	38,157,804
2029	73,619,275	2,543,838	2,554,115	(1,111,015)	1,628,618	3,229	5,618,785	(15,806,076)	4,268,773	1,284,448	35,823,706	37,795,569
2030	76,927,174	2,675,947	2,554,115	(1,106,425)	1,621,890	3,229	5,748,756	(15,834,098)	4,492,330	1,284,448	39,615,813	37,311,361
2031	80,369,015	2,812,728	2,554,115	(1,108,387)	1,624,766	3,229	5,886,451	(15,974,895)	4,742,800	1,284,448	43,673,368	36,695,647
2032	83,929,668	2,960,845	2,554,115	(1,118,243)	1,639,213	3,229	6,039,159	(16,221,920)	5,001,736	1,284,448	48,014,952	35,914,716
2033	87,621,422	3,113,879	2,554,115	(1,135,534)	1,664,561	3,229	6,200,250	(16,550,122)	5,244,004	1,284,448	52,660,447	34,960,975
2034	91,475,688	3,273,184	2,554,115	(1,158,509)	1,698,238	3,229	6,370,257	(16,968,920)	5,504,607	1,284,448	57,631,126	33,844,562
2035	95,491,429	3,437,379	2,554,115	(1,187,824)	1,741,212	3,229	6,548,111	(17,468,417)	5,763,160	1,284,448	62,949,753	32,541,676
2036	99,687,243	3,612,956	2,554,115	(1,222,789)	1,792,466	3,229	6,739,977	(18,046,457)	6,033,569	1,284,448	68,640,684	31,046,559
2037	104,075,367	3,798,314	2,554,115	(1,263,252)	1,851,780	3,229	6,944,186	(18,688,727)	6,302,008	1,284,448	74,729,980	29,345,387
2038	108,681,905	3,993,155	0	(1,308,211)	1,917,684	3,229	4,605,857	(21,927,149)	6,559,831	1,284,448	81,245,527	27,436,378
2039	113,543,295	4,201,111	0	(1,534,900)	2,249,984	3,229	4,919,424	(25,122,451)	6,830,278	1,284,448	88,217,162	25,326,133
2040	118,678,252	4,416,676	0	(1,758,572)	2,577,860	3,229	5,239,193	(28,294,123)	7,126,417	1,284,448	95,676,811	23,001,441
2041	124,086,524	4,648,154	0	(1,980,589)	2,903,311	3,229	5,574,105	(31,402,307)	7,397,841	1,284,448	103,658,636	20,427,888
2042	129,830,687	4,894,200	0	(2,198,161)	3,222,248	3,229	5,921,516	(34,511,936)	7,746,697	1,284,448	112,199,189	17,631,498
2043	135,866,663	5,151,940	0	(2,415,835)	3,541,332	3,229	6,280,666	(37,604,913)	8,089,195	1,284,448	121,337,580	14,529,083

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.