



May 12, 2011

[REDACTED]

Ms. Judy M. MacDonald
Treasurer & Collector
Town of Middleborough
20 Centre Street, 3rd Floor
Middleborough, MA 02346

Re: GASB 45 – Summary of Results

Dear Ms. MacDonald:

The purpose of this letter is to summarize our actuarial valuation of the Town of Middleborough Other Postemployment Benefits Plan (the "Plan") for the fiscal year ending June 30, 2011 in accordance with Statement No. 45 of the Governmental Accounting Standards Board ("GASB 45").

What is GASB 45 & why does it matter?

GASB 45 was issued to provide a more comprehensive and useful look at the costs and financial obligations that governments incur when they provide postemployment benefits other than pensions ("OPEB"). These benefits often include healthcare, dental insurance and life insurance. Prior to the implementation of GASB 45, most municipal entities accounted for these benefits on a "pay-as-you-go" basis (the actual cash costs of the benefits in a reporting period were charged to the financial statement with no accrual for future costs). It is hoped that GASB 45 will result in more informed policy decisions as all parties will have a better idea as to costs and will further result in a more accurate financial picture of the total costs of services provided by municipal entities by recognizing costs over the working lifetime of employees rather than after their employment has ceased.

What caused plan liabilities to change from FY 09 to FY 11

Plan experience was much more favorable than expected, the current APBO is \$91.9 million- had no changes been made we would have expected an APBO of \$117.2 million. The change in participant contributions from 10% to 20% for the HMO and



will actually receive a higher benefit by retiring early (more years of benefits to be received plus more years before Medicare). A key issue to keep in mind is that participant behavior (as far as retirement is concerned) is affected by many factors including the economy, personal health and work satisfaction.

For future medical care costs, we have assumed that such costs will increase at 7.8% for FY 2011, increasing by 7.0% for FY 2012, grading down to FY 2014 per year by 5.0%. If costs increase at rates higher than assumed, plan liabilities will escalate while costs less than those assumed will yield lower liabilities in the future.

We have an "unfunded liability". How do we fund it? Can we fund it?

The Plan currently has an unfunded liability of approximately \$91,901,926 and this amount is expected to grow over time in the foreseeable future. While some municipal entities across America have chose to fund this liability, over 95% are not currently dedicating funding to it. In order for funds to be considered as "plan assets", they must be placed in an irrevocable trust for this purpose. In January 2009, the State of Massachusetts passed legislation to allow municipalities to establish such a trust. To the best of our knowledge Town of Middleborough has not established an irrevocable trust for the purposes of prefunding liabilities under GASB 45.

How do we solve the "problem"? What can be done?

While you are more limited than Corporate America due to various statutory restrictions, you do have some options available to you to manage plan liabilities and "pre-fund" the liability.

Section 18 – your plan has not yet adopted Section 18 which would require those participants eligible for Medicare to participate in it and elect a Medicare integrated plan such as Medex or Managed Blue. The Plan currently has 171 participants over the age of 65 who are in non-Medicare integrated plans. This increases the annual retiree medical costs to the Town by nearly \$750,000 and the liabilities by approximately \$9 million. Current legislation pending before the State legislature would mandate Section 18 and would result in significant savings. Alternatively, the Town could adopt Section 18 at any time.



Pre-Funding – if you were to elect to “pre-fund” the OPEB expenses each year by contributing the entire Annual Required Contribution, you would be allowed to use a long-term interest rate based on your underlying investment policy. Assuming a balanced portfolio (50% equities & 50% fixed-income), you could discount plan liabilities at approximately 7.0% vs. the 4.0% used in our analysis. While this does not impact the ultimate cost of the plan, it would reduce disclosed liabilities and expenses.

Change in HMO cost sharing from 20% to 30% for retirees – assuming no other plan design or accounting changes, a change in the HMO premium percentage paid by retirees from 20% to 30% would decrease plan liabilities by approximately \$3.33 million, annual OPEB costs by approximately \$41,000 and expected payments by \$260,000.

Blue Cross Blue Shield new design – We worked with Blue Cross Blue Shield of Massachusetts last year to help them design a new product to address the OPEB obligations of municipalities. Basically, under this product the current benefits are slightly reduced for actives & retirees, Medicare benefits are “leveled” to be consistent with those prior to age 65, Flexible Spending Accounts are created for active employees and a VEBA is created to “pre-fund” the retiree liability. This approach creates current cost savings for the Town, long-term accounting benefits due to a higher discount rate, more security for employees/retirees as assets are available to pay future benefits and taxpayer “equity” in that today’s taxpayers pay today’s bills.

How does GASB 45 impact our bond ratings or ability to raise cash?

In the short run, GASB 45 is unlikely to have any material impact on bond ratings. While S&P, Moody’s & Fitch have all stated that they will reflect these figures in their ratings, the comparative financials to other municipal entities will be similar as they will have all adopted GASB 45. Over time, the outliers (those with very modest or very severe GASB 45 liabilities) are likely to see some benefit or harm to their ratings or financing operations.



Healthcare Reform in Massachusetts & Nationally – how does this impact our plan?

As noted earlier, the ultimate cost of the Plan is the premiums and benefits paid from the Plan less the contributions paid by retirees and their dependents. While you can slightly change participant contributions, the true costs of the Plan are the underlying costs of benefits and premiums. As such, if healthcare reform is successful in addressing the underlying cost issue, your Plan will benefit. The experiment in Massachusetts is still under review and the cost savings promised at implementation have yet to be achieved.

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

Sincerely,

A handwritten signature in dark ink, appearing to read 'Parker E. Elmore', with a long, sweeping flourish extending to the right.

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

**Town of Middleborough Other
Postemployment Benefits Plan**

GASB 45 Actuarial Valuation

as of

July 1, 2010

For the fiscal year ending

June 30, 2011

Delivered May 2011

TABLE OF CONTENTS

LETTER

SECTION

PAGE

I	PRINCIPAL RESULTS OF THE VALUATION	1
II	SUMMARY OF PLAN PROVISIONS	10
III	ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS	11

EXHIBITS

A	FINANCIAL STATEMENT DISCLOSURES	19
B	RECONCILIATION OF PLAN PARTICIPANTS	28
C	PROJECTED CASH FLOWS (CLOSED GROUP)	29
D	GLOSSARY OF TERMS	33

May 12, 2011


Ms. Judy M. MacDonald
Treasurer & Collector
Town of Middleborough
20 Centre Street, 3rd Floor
Middleborough, MA 02346

Dear Ms. MacDonald:

We have performed an actuarial valuation of the Town of Middleborough Other Postemployment Benefits Plan for the fiscal year ending June 30, 2011. The figures presented in this report reflect the adoption, by the Town of Middleborough, 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 Middleborough
Comparison of Plan Liabilities to Prior Valuation

	<u>July 1, 2010</u>	<u>July 1, 2008</u>
I. Actuarial Accrued Liability (Projected Unit Credit)		
A. Actives	27,930,736	32,320,590
B. Retirees/Disabled	<u>63,971,190</u>	<u>74,025,497</u>
C. Total	91,901,926	106,346,087
II. Plan Assets	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	91,901,926	106,346,087
IV. Funded Ratio	0.00%	0.00%
V. Unrecognized Transition Obligation	102,477,932	106,346,087
VI. Annual Covered Payroll	30,716,985	24,736,417
VII. UAAL as % of Covered Payroll	299.20%	429.9%
VIII. Net OPEB Obligation	14,338,003	0
IX. Number of Covered Participants		
A. Actives	538	564
B. Retirees/Disabled	<u>344</u>	<u>316</u>
C. Total	882	880
	<u>June 30, 2011</u>	<u>June 30, 2009</u>
X. Normal Cost	2,132,209	3,578,040
XI. Amortization of UAAL - 30 year flat dollar	5,913,467	5,913,467
XII. Annual Required Contribution ("ARC") [X. + XI.]	8,045,676	9,491,507
XIII. Interest on Net OPEB Obligation	573,519	379,660
XIV. Adjustment to Annual Required Contribution	(797,278)	0
XV. Annual OPEB Cost [XII. + XIII. + XIV.]	7,821,917	9,871,167
XVI. Expected Employer Contribution	3,229,699	2,463,312
XVII. Percentage of Annual OPEB Cost Contributed	41.3%	25.0%
XVIII. Net OPEB Obligation at Beginning of Year (VIII.)	14,338,003	0
XIX. Increase in Net OPEB Obligations (XV. - XVI.)	4,592,218	7,407,855
XX. Net OPEB Obligation at End of Year (XVIII. + XIX.)	18,930,221	7,407,855
XXI. Discount Rate	4.00%	4.00%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Middleborough
Plan Liabilities as of July 1, 2010**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	27,860,494	0	70,242	27,930,736
B. Retirees/Disabled	<u>63,717,337</u>	<u>0</u>	<u>253,853</u>	<u>63,971,190</u>
C. Total	91,577,831	0	324,095	91,901,926
II. Plan Assets	0	0	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	91,577,831	0	324,095	91,901,926
IV. Unrecognized Transition Obligation	102,307,878	0	170,054	102,477,932
V. Annual Covered Payroll	30,716,985	30,716,985	30,716,985	30,716,985
VI. UAAL as % of Covered Payroll	298.1%	0.0%	1.1%	299.2%
VII. Net OPEB Obligation	14,287,440	0	50,563	14,338,003
VIII. Number of Covered Participants				
A. Actives	538	0	538	
B. Retirees/Disabled	<u>344</u>	<u>0</u>	<u>299</u>	
C. Total	882	0	837	

For Fiscal Year Ending June 30, 2011

IX. Normal Cost	2,127,402	0	4,807	2,132,209
X. Amortization of UAAL - 30 year flat dollar	5,903,654	0	9,813	5,913,467
XI. Annual Required Contribution ("ARC") [IX. + X.]	8,031,056	0	14,620	8,045,676
XII. Interest on Net OPEB Obligation	571,496	0	2,023	573,519
XIII. Adjustment to Annual Required Contribution	(794,466)	0	(2,812)	(797,278)
XIV. Annual OPEB Cost [XI. + XII. + XIII.]	7,808,086	0	13,831	7,821,917
XV. Expected Employer Contribution	3,217,401	0	12,298	3,229,699
XVI. Percentage of Annual OPEB Cost Contributed	41.2%	0.0%	88.9%	41.3%
XVII. Net OPEB Obligation at Beginning of Year (VII.)	14,287,440	0	50,563	14,338,003
XVIII. Increase in Net OPEB Obligations (XIV. - XV.)	4,590,685	0	1,533	4,592,218
XIX. Net OPEB Obligation at End of Year (XVII. + XVIII.)	18,878,125	0	52,096	18,930,221

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Middleborough
General Employees
Plan Liabilities as of July 1, 2010**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	8,396,325	0	19,138	8,415,463
B. Retirees/Disabled	<u>27,803,562</u>	<u>0</u>	<u>92,054</u>	<u>27,895,616</u>
C. Total	36,199,887	0	111,192	36,311,079
II. Plan Assets	0	0	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	36,199,887	0	111,192	36,311,079
IV. Unrecognized Transition Obligation	35,879,608	0	58,349	35,937,957
V. Annual Covered Payroll	8,710,442	8,710,442	8,710,442	8,710,442
VI. UAAL as % of Covered Payroll	415.6%	0.0%	1.3%	416.9%
VII. Net OPEB Obligation	5,647,695	0	17,348	5,665,043
VIII. Number of Covered Participants				
A. Actives	157	0	157	
B. Retirees/Disabled	<u>138</u>	<u>0</u>	<u>110</u>	
C. Total	295	0	267	
For Fiscal Year Ending June 30, 2011				
IX. Normal Cost	631,281	0	1,326	632,607
X. Amortization of UAAL - 30 year flat dollar	2,070,425	0	3,367	2,073,792
XI. Annual Required Contribution ("ARC") [IX. + X.]	2,701,706	0	4,693	2,706,399
XII. Interest on Net OPEB Obligation	225,908	0	694	226,602
XIII. Adjustment to Annual Required Contribution	(314,045)	0	(965)	(315,010)
XIII. Annual OPEB Cost [XI. + XII. + XIII.]	2,613,569	0	4,422	2,617,991
XIV. Expected Employer Contribution	1,292,396	0	4,046	1,296,442
XVI. Percentage of Annual OPEB Cost Contributed	49.4%	0.0%	91.5%	49.5%
XVII. Net OPEB Obligation at Beginning of Year (VII.)	5,647,695	0	17,348	5,665,043
XVIII. Increase in Net OPEB Obligations (XIII. - XIV.)	1,321,173	0	376	1,321,549
XIX. Net OPEB Obligation at End of Year (XVII. + XVIII.)	6,968,868	0	17,724	6,986,592

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Middleborough
School Employees
Plan Liabilities as of July 1, 2010**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	18,705,180	0	49,390	18,754,570
B. Retirees/Disabled	<u>33,639,698</u>	<u>0</u>	<u>152,765</u>	<u>33,792,463</u>
C. Total	52,344,878	0	202,155	52,547,033
II. Plan Assets	0	0	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	52,344,878	0	202,155	52,547,033
IV. Unrecognized Transition Obligation	62,420,353	0	106,074	62,526,427
V. Annual Covered Payroll	21,202,241	21,202,241	21,202,241	21,202,241
VI. UAAL as % of Covered Payroll	246.9%	0.0%	1.0%	247.9%
VII. Net OPEB Obligation	8,166,543	0	31,539	8,198,082
VIII. Number of Covered Participants				
A. Actives	361	0	361	
B. Retirees/Disabled	<u>194</u>	<u>0</u>	<u>178</u>	
C. Total	555	0	539	
For Fiscal Year Ending June 30, 2011				
IX. Normal Cost	1,425,697	0	3,335	1,429,032
X. Amortization of UAAL - 30 year flat dollar	3,601,953	0	6,121	3,608,074
XI. Annual Required Contribution ("ARC") [IX. + X.]	5,027,650	0	9,456	5,037,106
XII. Interest on Net OPEB Obligation	326,662	0	1,262	327,924
XIII. Adjustment to Annual Required Contribution	(454,108)	0	(1,754)	(455,862)
XIII. Annual OPEB Cost [XI. + XII. + XIII.]	4,900,204	0	8,964	4,909,168
XIV. Expected Employer Contribution	1,804,473	0	7,772	1,812,245
XVI. Percentage of Annual OPEB Cost Contributed	36.8%	0.0%	86.7%	36.9%
XVII. Net OPEB Obligation at Beginning of Year (VII.)	8,166,543	0	31,539	8,198,082
XVIII. Increase in Net OPEB Obligations (XIII. - XIV.)	3,095,731	0	1,192	3,096,923
XIX. Net OPEB Obligation at End of Year (XVII. + XVIII.)	11,262,274	0	32,731	11,295,005

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Middleborough
Jarius Agency Employees
Plan Liabilities as of July 1, 2010**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	9,503	0	12	9,515
B. Retirees/Disabled	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
C. Total	9,503	0	12	9,515
II. Plan Assets	0	0	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	9,503	0	12	9,515
IV. Unrecognized Transition Obligation	555	0	0	555
V. Annual Covered Payroll	48,906	48,906	48,906	48,906
VI. UAAL as % of Covered Payroll	19.4%	0.0%	0.0%	19.5%
VII. Net OPEB Obligation	1,483	0	2	1,485
VIII. Number of Covered Participants				
A. Actives	2	0	2	
B. Retirees/Disabled	<u>0</u>	<u>0</u>	<u>0</u>	
C. Total	2	0	2	
For Fiscal Year Ending June 30, 2011				
IX. Normal Cost	3,535	0	4	3,539
X. Amortization of UAAL - 30 year flat dollar	32	0	0	32
XI. Annual Required Contribution ("ARC") [IX. + X.]	3,567	0	4	3,571
XII. Interest on Net OPEB Obligation	59	0	0	59
XIII. Adjustment to Annual Required Contribution	(82)	0	0	(82)
XIII. Annual OPEB Cost [XI. + XII. + XIII.]	3,544	0	4	3,548
XIV. Expected Employer Contribution	0	0	0	0
XVI. Percentage of Annual OPEB Cost Contributed	0.0%	0.0%	0.0%	0.0%
XVII. Net OPEB Obligation at Beginning of Year (VII.)	1,483	0	2	1,485
XVIII. Increase in Net OPEB Obligations (XIII. - XIV.)	3,544	0	4	3,548
XIX. Net OPEB Obligation at End of Year (XVII. + XVIII.)	5,027	0	6	5,033

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

**Town of Middleborough
Trash Employees
Plan Liabilities as of July 1, 2010**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	75,348	0	326	75,674
B. Retirees/Disabled	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
C. Total	75,348	0	326	75,674
II. Plan Assets	0	0	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	75,348	0	326	75,674
IV. Unrecognized Transition Obligation	11,697	0	173	11,870
V. Annual Covered Payroll	162,489	162,489	162,489	162,489
VI. UAAL as % of Covered Payroll	46.4%	0.0%	0.2%	46.6%
VII. Net OPEB Obligation	11,755	0	51	11,806
VIII. Number of Covered Participants				
A. Actives	4	0	4	
B. Retirees/Disabled	<u>0</u>	<u>0</u>	<u>0</u>	
C. Total	4	0	4	
For Fiscal Year Ending June 30, 2011				
IX. Normal Cost	11,670	0	42	11,712
X. Amortization of UAAL - 30 year flat dollar	675	0	10	685
XI. Annual Required Contribution ('ARC') [IX. + X.]	12,345	0	52	12,397
XII. Interest on Net OPEB Obligation	470	0	2	472
XIII. Adjustment to Annual Required Contribution	(654)	0	(3)	(657)
XIV. Annual OPEB Cost [XI. + XII. + XIII.]	12,161	0	51	12,212
XV. Expected Employer Contribution	0	0	0	0
XVI. Percentage of Annual OPEB Cost Contributed	0.0%	0.0%	0.0%	0.0%
XVII. Net OPEB Obligation at Beginning of Year (VII.)	11,755	0	51	11,806
XVIII. Increase in Net OPEB Obligations (XIV. - XV.)	12,161	0	51	12,212
XIX. Net OPEB Obligation at End of Year (XVII. + XVIII.)	23,916	0	102	24,018

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Middleborough
Water Employees
Plan Liabilities as of July 1, 2010**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	495,693	0	1,092	496,785
B. Retirees/Disabled	<u>1,710,861</u>	<u>0</u>	<u>7,252</u>	<u>1,718,113</u>
C. Total	2,206,554	0	8,344	2,214,898
II. Plan Assets	0	0	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	2,206,554	0	8,344	2,214,898
IV. Unrecognized Transition Obligation	2,931,646	0	4,384	2,936,030
V. Annual Covered Payroll	370,396	370,396	370,396	370,396
VI. UAAL as % of Covered Payroll	595.7%	0.0%	2.3%	598.0%
VII. Net OPEB Obligation	344,254	0	1,302	345,556
VIII. Number of Covered Participants				
A. Actives	9	0	9	
B. Retirees/Disabled	2	0	2	
C. Total	18	0	18	

For Fiscal Year Ending June 30, 2011

IX. Normal Cost	36,730	0	69	36,799
X. Amortization of UAAL - 30 year flat dollar	169,170	0	253	169,423
XI. Annual Required Contribution ('ARC') [IX. + X.]	205,900	0	322	206,222
XII. Interest on Net OPEB Obligation	13,770	0	52	13,822
XIII. Adjustment to Annual Required Contribution	(19,143)	0	(72)	(19,215)
XIII. Annual OPEB Cost [XI. + XII. + XIII.]	200,527	0	302	200,829
XIV. Expected Employer Contribution	82,381	0	403	82,784
XVI. Percentage of Annual OPEB Cost Contributed	41.1%	0.0%	133.4%	41.2%
XVII. Net OPEB Obligation at Beginning of Year (VII.)	344,254	0	1,302	345,556
XVIII. Increase in Net OPEB Obligations (XIII. - XIV.)	118,146	0	(101)	118,045
XIX. Net OPEB Obligation at End of Year (XVII. + XVIII.)	462,400	0	1,201	463,601

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Middleborough
Waste Water Employees
Plan Liabilities as of July 1, 2010**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I. Actuarial Accrued Liability (Projected Unit Credit)				
A. Actives	178,445	0	284	178,729
B. Retirees/Disabled	<u>563,216</u>	<u>0</u>	<u>1,782</u>	<u>564,998</u>
C. Total	741,661	0	2,066	743,727
II. Plan Assets	0	0	0	0
III. Unfunded Actuarial Accrued Liability ("UAAL")	741,661	0	2,066	743,727
IV. Unrecognized Transition Obligation	1,064,019	0	1,074	1,065,093
V. Annual Covered Payroll	222,511	222,511	222,511	222,511
VI. UAAL as % of Covered Payroll	333.3%	0.0%	0.9%	334.2%
VII. Net OPEB Obligation	115,710	0	321	116,031
VIII. Number of Covered Participants				
A. Actives	5	0	5	
B. Retirees/Disabled	<u>3</u>	<u>0</u>	<u>2</u>	
C. Total	8	0	7	
For Fiscal Year Ending June 30, 2011				
IX. Normal Cost	18,489	0	31	18,520
X. Amortization of UAAL - 30 year flat dollar	61,399	0	62	61,461
XI. Annual Required Contribution ('ARC') [IX. + X.]	79,888	0	93	79,981
XII. Interest on Net OPEB Obligation	4,628	0	13	4,641
XIII. Adjustment to Annual Required Contribution	(6,434)	0	(18)	(6,452)
XIII. Annual OPEB Cost [XI. + XII. + XIII.]	78,082	0	88	78,170
XIV. Expected Employer Contribution	38,151	0	77	38,228
XVI. Percentage of Annual OPEB Cost Contributed	48.9%	0.0%	87.5%	48.9%
XVII. Net OPEB Obligation at Beginning of Year (VII.)	115,710	0	321	116,031
XVIII. Increase in Net OPEB Obligations (XIII. - XIV.)	39,931	0	11	39,942
XIX. Net OPEB Obligation at End of Year (XVII. + XVIII.)	155,641	0	332	155,973

Town of Middleborough Other Postemployment Benefits Plan
Actuarial Valuation as of July 1, 2010

May 2011

Page 8

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 and a flat dollar amortization of the Unfunded Actuarial Accrued Liability at transition. This approach yields an amortization charge of \$5,913,467. 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 2011 fiscal year is \$2,132,209. The combined amortization charge and normal cost represent the Annual Required Contribution ("ARC") for the plan for the 2011 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 2011 fiscal year beyond the "pay-as-you-go" costs is \$4,592,218.

2. Plan Experience:

Plan experience was much more favorable than expected, the current APBO is \$91.9 million- had no changes been made we would have expected an APBO of \$117.2 million. The change in participant contributions from 10% to 20% for the HMO and 25% to 40% for the PPO resulted in a savings of approximately \$7.0 million (6.0%) from the total APBO. Additionally, the lower than expected increase in medical costs and plan design changes resulted in a reduction of the APBO of approximately \$18.1 million (15.5%).

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 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service.
<u>Credited Service</u>	Elapsed time from date of hire to termination of service date.
<u>Participant Contributions</u>	20% of premiums for BCBS HMO, 40% of premiums for BCBS PPO, 25% of premiums for Medex, Managed Blue and life insurance.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Blue Cross Blue Shield of Massachusetts and 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 total service.

Actuarial gains and losses are calculated each year and amortized over the minimum and maximum periods allowed by law from the year of such gain or loss.

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>Male</u>	<u>Female</u>
0	15.00%	15.00%
10	5.40%	5.40%
20	2.00%	2.00%
30	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>Male</u>	<u>Female</u>
50	1.00%	1.50%
51	1.00%	1.50%
52	1.00%	2.00%
53	1.00%	2.50%
54	2.00%	2.50%
55	2.00%	5.50%
56	2.50%	6.50%
57	2.50%	6.50%
58	5.00%	6.50%
59	6.50%	6.50%
60	12.00%	5.00%
61	20.00%	13.00%
62	30.00%	15.00%
63	25.00%	12.50%
64	22.00%	18.00%
65	40.00%	15.00%
66	25.00%	20.00%
67	25.00%	20.00%
68	30.00%	25.00%
69	30.00%	20.00%
70	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	8.0%	8.5%
FY 2009	2.2%	8.0%
FY 2010	2.2%	7.5%
FY 2011	7.8%	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 plans upon retirement. All eligible employees were assumed to be covered under the retiree life insurance program.

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

4.50% 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

Initial premiums were developed for the two classes of retirees (pre-65 and post-65). These premiums were developed using fully insured premium rates in conjunction with census data for the retired participants of the Town of Middleborough's medical benefit program.

The pre-65 fully insured premiums are blended rates based on the combined experience of active and pre-65 retired members. Therefore, there is an implicit employer subsidy for the non-Medicare eligible retirees as the average costs of providing healthcare benefits to retirees under age 65 is higher than the average cost of providing healthcare benefits to active employees. The true per-capita cost for the non-Medicare retirees is developed by adjusting the demographic differences between the actives and retirees to reflect this implicit rate subsidy for the retirees. For the Medicare eligible retirees, the premium rate will be used as the basis of the initial pre-capita cost without adjustment as the rate reflects the actual claim experience of the post-65 retiree group.

Age graded and sex distinct premiums are utilized in this valuation. The premiums developed by the preceding process are appropriate for the existing unique age and sex distribution. Over the future years covered by this valuation, the age and sex distribution will likely change. Therefore, the process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each specific age/sex combination. The age/sex specific premiums more accurately reflect the healthcare utilization and cost at that age.

Based on guidance provided by GASB on issues related to Medicare Part D payments to State and Local Governments effective as of June 30, 2006, an employer should apply the measurement requirements of GASB Statement No. 45 to determine the actuarial accrued liabilities, the annual required contribution of the employer, and the annual OPEB cost without reduction for Retiree Drug Subsidy (RDS) payments. Therefore, the impact of the RDS that is part of Medicare Prescription Drug Improvement and Modernization Act of 2003 is not reflected in this report.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

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

	Number of Participants			
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
BCBS Network Blue Tiered v3	220		495	715
BCBS Tiered PPO v3	29		19	48
BCBS Managed Blue	1			1
BCBS Medex III	<u>41</u>	<u>29</u>		70
Total	291	29	514	834

	Per Contract Costs (monthly) - FY 2012		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
BCBS Network Blue Tiered v3	581.11		1,522.59
BCBS Tiered PPO v3	587.23		1,538.62
BCBS Managed Blue	426.18	852.36	
BCBS Medex III	489.56	979.12	

Gross Expected FY 2012 Non Medicare Incurred Premiums	11,133,476
Adjustment to reflect children's claims	<u>(2,223,626)</u>
Total Expected FY 2012 Non Medicare Incurred Premiums (adults only)	8,909,850

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

	<u>Employer Primary</u>	<u>Medicare Primary</u>
Age 65	9,238	5,867
Average Age	9,200	5,867

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2010)

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: Blue Cross HMO Blue New England v3, Blue Care Elect Preferred (PPO) v3, Blue Cross – Medex 3 and Blue Cross Managed Blue for Seniors
- b. Administrator: Town of Middleborough
- c. Eligibility: An employee shall become eligible to retire under this plan upon meeting attainment of age 55 as an active member and completion of 10 years of service.
- d. Cost Sharing: 20% of premiums for BCBS HMO, 40% of premiums for BCBS PPO, 25% of premiums for Medex and Managed Blue.

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 - \$2,000
- b. Administrator: Town of Middleborough
- c. Eligibility: Same as above
- d. Cost sharing: 25% of premiums.

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2010)
(continued)

4. RETIREE MEDICAL, DENTAL AND LIFE INSURANCE CONTRIBUTIONS:

Group	Individual	Family
Medical	20% of premiums for BCBS HMO, 40% of premiums for BCBS PPO, 25% of premiums for Medex and Managed Blue.	20% of premiums for BCBS HMO, 40% of premiums for BCBS PPO, 25% of premiums for Medex and Managed Blue.
Dental	N/A	N/A
Life	25% of premiums	N/A

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2010)

(continued)

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 2011 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$3,229,699.

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2010)

(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	\$8,045,676
Interest on net OPEB obligation	\$573,519
Adjustment to annual required contribution	(\$797,278)
Annual OPEB cost (expense)	\$7,821,917
Contributions made	<u>\$3,229,699</u>
Increase in net OPEB obligation	\$4,592,218
Net OPEB Obligation – beginning of year	\$14,338,003
Net OPEB Obligation – end of year	\$18,930,221

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2010)

(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 2011 fiscal year and the two preceding years were as follows:

Fiscal Year Ended	Annual OPEB Cost	Expected Employer Payments	Increase in OPEB Obligation
06/30/2009	\$9,871,167	\$2,463,312	\$7,407,855
06/30/2010	\$9,871,167	\$2,699,066	\$7,172,101
06/30/2011	\$7,821,917	\$3,229,699	\$4,592,218
06/30/2012 (est.)	\$7,837,439	\$3,496,756	\$4,340,683
06/30/2013 (est.)	\$7,855,345	\$3,738,400	\$4,116,945

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	\$106,346,087	\$106,346,087	0.00%	\$24,736,417	429.92%
07/01/2009	\$0	\$111,808,514	\$111,808,514	0.00%	\$25,725,874	434.62%
07/01/2010	\$0	\$91,901,926	\$91,901,926	0.00%	\$30,716,985	299.20%
07/01/2011 (est.)	\$0	\$94,436,619	\$94,436,619	0.00%	\$32,099,249	294.20%
07/01/2012 (est.)	\$0	\$96,885,627	\$96,885,627	0.00%	\$33,543,716	288.83%

Note: The tables shown above do not include the gas and electric department for prior years as they separately report their GASB45 results.

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2010)
(continued)

Fiscal Year Ending June 30, 2011									
	<u>General</u>	<u>School</u>	<u>Iarius</u>	<u>Trash</u>	<u>Water</u>	<u>Waste Water</u>	<u>Government</u>	<u>Business-</u>	<u>Total</u>
	<u>Employees</u>	<u>Employees</u>	<u>Agency</u>	<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Activities</u>	<u>Type</u>	
			<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Activities</u>	<u>Activities</u>	
OPEB obligation at beginning of year	5,665,043	8,198,082	1,485	11,806	345,556	116,031	13,876,416	461,587	14,338,003
Annual OPEB Cost	2,617,990	4,909,168	3,548	12,212	200,829	78,170	7,542,918	278,999	7,821,917
Expected Employer Payments	1,296,442	1,812,245	-	-	82,784	38,228	3,108,687	121,012	3,229,699
Increase in OPEB Obligation	1,321,548	3,096,923	3,548	12,212	118,045	39,942	4,434,231	157,987	4,592,218
OPEB obligation at end of year	6,986,591	11,295,005	5,033	24,018	463,601	155,973	18,310,647	619,574	18,930,221
APBO at beginning of year	36,311,079	52,547,033	9,515	75,674	2,214,898	743,727	88,943,301	2,958,625	91,901,926

Fiscal Year Ending June 30, 2012									
	<u>General</u>	<u>School</u>	<u>Iarius</u>	<u>Trash</u>	<u>Water</u>	<u>Waste Water</u>	<u>Government</u>	<u>Business-</u>	<u>Total</u>
	<u>Employees</u>	<u>Employees</u>	<u>Agency</u>	<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Activities</u>	<u>Type</u>	
			<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Activities</u>	<u>Activities</u>	
OPEB obligation at beginning of year	6,986,591	11,295,005	5,033	24,018	463,601	155,973	18,310,647	619,574	18,930,221
Annual OPEB Cost	2,623,185	4,918,910	3,555	12,236	201,228	78,325	7,557,886	279,553	7,837,439
Expected Employer Payments	1,403,642	1,962,096	-	-	89,629	41,389	3,365,738	131,018	3,496,756
Increase in OPEB Obligation	1,219,543	2,956,814	3,555	12,236	111,599	36,936	4,192,148	148,535	4,340,683
OPEB obligation at end of year	8,206,134	14,251,819	8,588	36,254	575,200	192,909	22,502,795	768,109	23,270,904
APBO at beginning of year	37,312,554	53,996,302	9,777	77,761	2,275,986	764,239	91,396,394	3,040,225	94,436,619

Fiscal Year Ending June 30, 2013									
	<u>General</u>	<u>School</u>	<u>Iarius</u>	<u>Trash</u>	<u>Water</u>	<u>Waste Water</u>	<u>Government</u>	<u>Business-</u>	<u>Total</u>
	<u>Employees</u>	<u>Employees</u>	<u>Agency</u>	<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Activities</u>	<u>Type</u>	
			<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Employees</u>	<u>Activities</u>	<u>Activities</u>	
OPEB obligation at beginning of year	8,206,134	14,251,819	8,588	36,254	575,200	192,909	22,502,795	768,109	23,270,904
Annual OPEB Cost	2,629,178	4,930,148	3,563	12,264	201,688	78,504	7,575,153	280,192	7,855,345
Expected Employer Payments	1,500,641	2,097,687	-	-	95,823	44,249	3,598,328	140,072	3,738,400
Increase in OPEB Obligation	1,128,537	2,832,461	3,563	12,264	105,865	34,255	3,976,825	140,120	4,116,945
OPEB obligation at end of year	9,334,671	17,084,280	12,151	48,518	681,065	227,164	26,479,620	908,229	27,387,849
APBO at beginning of year	38,280,174	55,396,578	10,031	79,778	2,335,009	784,057	93,766,561	3,119,066	96,885,627

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2010)

(continued)

7. FUNDED STATUS AND FUNDING PROGRESS

As of July 1, 2010, the most recent valuation date, the plan was 0.00% funded. The actuarial liability for benefits was \$91,901,926, and the actuarial value of assets was \$ 0, resulting in an unfunded actuarial accrued liability (UAAL) of \$91,901,926. The covered payroll (annual payroll of active employees covered by the plan) was \$ 30,716,985 and the ratio of the UAAL to the covered payroll was 299.2%.

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 \$110,287,458 or by 20.4% and the corresponding Normal Cost would increase to \$2,851,644 or by 34.0%. 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 \$76,403,262 or by 16.5% and the corresponding Normal Cost would decrease to \$1,575,567 or by 25.9%.

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2010)

(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	8.0%	8.5%
FY 2009	2.2%	8.0%
FY 2010	2.2%	7.5%
FY 2011	7.8%	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: 3.50% per annum
Annual Compensation Increases: 4.50% per annum
Actuarial Value of Assets: Market Value
Amortization of UAAL: Level dollar amortization over 30 years at transition
Remaining Amortization Period: 28 years at July 1, 2010

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2010)

(continued)

10. Impact of Section 9A1/2 of M.G.L. Section 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 Middleborough nor have we attempted to value the impact of prior Town of Middleborough employees currently working at other governmental entities in the State of Massachusetts.

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 Middleborough has not established an irrevocable trust for the purposes of prefunding liabilities under GASB 45.

EXHIBIT B

Reconciliation of Plan Participation
(As of July 1, 2010)

ACTIVE EMPLOYEES

	<u>July 1, 2010</u>	<u>July 1, 2008</u>
A. Average Age at Hire	36.79	36.41
B. Average Service	11.07	10.12
C. Average Current Age	47.86	46.53

EXHIBIT C

Projected Cash Flows (Open Group)

Fiscal Year	Total APBO	Normal Cost	Employer Payments	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Expected Annual OPEB Cost	Expected OPEB Obligation	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
2011	91,901,926	2,132,209	3,229,699	5,913,467	573,519	(797,278)	7,821,917	14,338,003	0	0	91,901,926
2012	94,436,619	2,219,394	3,496,756	5,913,467	757,209	(1,052,631)	7,837,439	18,930,221	0	0	94,436,619
2013	96,885,627	2,305,041	3,738,400	5,913,467	930,836	(1,293,999)	7,855,345	23,270,904	0	0	96,885,627
2014	99,271,396	2,374,153	3,958,296	5,913,467	1,095,514	(1,522,925)	7,860,209	27,387,849	0	0	99,271,396
2015	101,594,744	2,454,921	4,164,589	5,913,467	1,251,590	(1,739,894)	7,880,084	31,289,762	0	0	101,594,744
2016	103,880,998	2,544,318	4,372,885	5,913,467	1,400,210	(1,946,498)	7,911,497	35,005,257	0	0	103,880,998
2017	106,134,528	2,617,575	4,537,460	5,913,467	1,541,754	(2,143,265)	7,929,531	38,543,870	0	0	106,134,528
2018	108,384,444	2,718,109	4,755,684	5,913,467	1,677,437	(2,331,884)	7,977,129	41,935,941	0	0	108,384,444
2019	110,601,126	2,824,701	4,965,653	5,913,467	1,806,296	(2,511,015)	8,033,449	45,157,386	0	0	110,601,126
2020	112,798,581	2,934,166	5,198,537	5,913,467	1,929,007	(2,681,603)	8,095,037	48,225,181	0	0	112,798,581
2021	114,955,579	3,064,356	5,405,514	5,913,467	2,044,867	(2,842,665)	8,180,025	51,121,681	0	0	114,955,579
2022	117,120,022	3,186,544	5,646,182	5,913,467	2,155,847	(2,996,944)	8,258,914	53,896,192	0	0	117,120,022
2023	119,246,952	3,326,658	5,896,259	5,913,467	2,260,357	(3,142,228)	8,358,254	56,508,924	0	0	119,246,952
2024	121,344,689	3,481,988	6,106,345	5,913,467	2,358,837	(3,279,129)	8,475,163	58,970,919	0	0	121,344,689
2025	123,469,245	3,650,056	6,335,735	5,913,467	2,453,590	(3,410,849)	8,606,264	61,339,737	0	0	123,469,245
2026	125,616,054	3,834,810	6,519,882	5,913,467	2,544,411	(3,537,104)	8,755,584	63,610,266	0	0	125,616,054
2027	127,848,563	4,036,103	6,678,995	5,913,467	2,633,839	(3,661,422)	8,921,987	65,845,968	0	0	127,848,563
2028	130,213,897	4,246,504	6,846,737	5,913,467	2,723,559	(3,786,145)	9,097,385	68,088,960	0	0	130,213,897
2029	132,718,991	4,465,547	7,011,835	5,913,467	2,813,584	(3,911,295)	9,281,303	70,339,607	0	0	132,718,991
2030	135,379,610	4,710,572	7,173,314	5,913,467	2,904,605	(4,037,827)	9,490,817	72,615,122	0	0	135,379,610
2031	138,233,638	4,966,659	7,294,872	5,913,467	2,997,631	(4,167,147)	9,710,610	74,940,784	0	0	138,233,638
2032	141,342,005	5,239,373	7,419,248	5,913,467	3,094,601	(4,301,949)	9,945,492	77,365,029	0	0	141,342,005
2033	144,728,884	5,524,769	7,543,908	5,913,467	3,196,002	(4,442,912)	10,191,326	79,900,056	0	0	144,728,884
2034	148,418,806	5,822,113	7,642,000	5,913,467	3,302,258	(4,590,623)	10,447,215	82,556,461	0	0	148,418,806
2035	152,463,095	6,141,031	7,739,641	5,913,467	3,414,832	(4,747,116)	10,722,214	85,370,788	0	0	152,463,095
2036	156,899,583	6,473,422	7,835,392	5,913,467	3,534,500	(4,913,473)	11,007,916	88,362,492	0	0	156,899,583

EXHIBIT C

Projected Cash Flows (Open Group)
(continued)

Medical Insurance

Fiscal Year	Total APBO	Normal Cost	Employer Payments	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Expected Annual OPEB Cost	Expected OPEB Obligation	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
2011	91,577,831	2,127,402	3,217,401	5,903,654	571,496	(794,466)	7,808,086	14,287,440	0	0	91,577,831
2012	94,107,350	2,214,562	3,484,149	5,903,654	755,125	(1,049,734)	7,823,607	18,878,125	0	0	94,107,350
2013	96,551,273	2,300,187	3,725,459	5,903,654	928,703	(1,291,034)	7,841,510	23,217,583	0	0	96,551,273
2014	98,932,072	2,369,358	3,944,944	5,903,654	1,093,345	(1,519,910)	7,846,447	27,333,634	0	0	98,932,072
2015	101,250,746	2,450,178	4,150,811	5,903,654	1,249,405	(1,736,857)	7,866,380	31,235,137	0	0	101,250,746
2016	103,532,634	2,539,595	4,358,659	5,903,654	1,398,028	(1,943,464)	7,897,813	34,950,706	0	0	103,532,634
2017	105,782,113	2,612,963	4,522,726	5,903,654	1,539,594	(2,140,262)	7,915,949	38,489,860	0	0	105,782,113
2018	108,028,453	2,713,540	4,740,432	5,903,654	1,675,323	(2,328,945)	7,963,572	41,883,083	0	0	108,028,453
2019	110,242,004	2,820,167	4,949,860	5,903,654	1,804,249	(2,508,171)	8,019,899	45,106,223	0	0	110,242,004
2020	112,436,803	2,929,689	5,182,168	5,903,654	1,927,050	(2,678,883)	8,081,510	48,176,262	0	0	112,436,803
2021	114,591,697	3,059,907	5,388,550	5,903,654	2,043,024	(2,840,103)	8,166,482	51,075,604	0	0	114,591,697
2022	116,754,597	3,182,193	5,628,582	5,903,654	2,154,141	(2,994,572)	8,245,416	53,853,536	0	0	116,754,597
2023	118,880,687	3,322,376	5,878,025	5,903,654	2,258,815	(3,140,084)	8,344,761	56,470,370	0	0	118,880,687
2024	120,978,283	3,477,760	6,087,487	5,903,654	2,357,484	(3,277,249)	8,461,649	58,937,106	0	0	120,978,283
2025	123,103,398	3,645,878	6,316,257	5,903,654	2,452,451	(3,409,266)	8,592,717	61,311,268	0	0	123,103,398
2026	125,251,481	3,830,670	6,499,806	5,903,654	2,543,509	(3,535,851)	8,741,982	63,587,728	0	0	125,251,481
2027	127,485,979	4,031,978	6,658,356	5,903,654	2,633,196	(3,660,529)	8,908,299	65,829,904	0	0	127,485,979
2028	129,853,985	4,242,394	6,825,575	5,903,654	2,723,194	(3,785,639)	9,083,603	68,079,847	0	0	129,853,985
2029	132,362,414	4,461,463	6,990,187	5,903,654	2,813,515	(3,911,198)	9,267,434	70,337,875	0	0	132,362,414
2030	135,027,037	4,706,486	7,151,256	5,903,654	2,904,605	(4,037,827)	9,476,918	72,615,122	0	0	135,027,037
2031	137,885,653	4,962,574	7,272,467	5,903,654	2,997,631	(4,167,147)	9,696,712	74,940,784	0	0	137,885,653
2032	140,999,153	5,235,287	7,396,566	5,903,654	3,094,601	(4,301,949)	9,931,593	77,365,029	0	0	140,999,153
2033	144,391,657	5,520,682	7,521,021	5,903,654	3,196,002	(4,442,912)	10,177,426	79,900,056	0	0	144,391,657
2034	148,087,641	5,818,027	7,618,989	5,903,654	3,302,258	(4,590,623)	10,433,316	82,556,461	0	0	148,087,641
2035	152,138,365	6,136,933	7,716,599	5,903,654	3,414,832	(4,747,116)	10,708,303	85,370,788	0	0	152,138,365
2036	156,581,564	6,469,315	7,812,404	5,903,654	3,534,500	(4,913,473)	10,993,996	88,362,492	0	0	156,581,564

EXHIBIT C

Projected Cash Flows (Open Group)
(continued)

Dental Insurance													
Fiscal Year	Total APBO	Service Cost	Employer Payments	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Expected Annual OPEB Cost	Expected OPEB Obligation	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")	Unfunded Accrued Actuarial Liability ("UAAL")	Unfunded Accrued Actuarial Liability ("UAAL")
2011	0	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0

EXHIBIT C

Projected Cash Flows (Open Group)
(continued)

Life Insurance

Fiscal Year	Total APBO	Normal Cost	Employer Payments	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Expected Annual OPEB Cost	Expected OPEB Obligation	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Liability ("UAAL")
2011	324,095	4,807	12,298	9,813	2,023	(2,812)	13,831	50,563	0	0	324,095
2012	329,269	4,832	12,607	9,813	2,084	(2,897)	13,832	52,096	0	0	329,269
2013	334,354	4,854	12,941	9,813	2,133	(2,965)	13,835	53,321	0	0	334,354
2014	339,324	4,795	13,352	9,813	2,169	(3,015)	13,762	54,215	0	0	339,324
2015	343,998	4,743	13,778	9,813	2,185	(3,037)	13,704	54,625	0	0	343,998
2016	348,364	4,723	14,273	9,813	2,182	(3,033)	13,685	54,010	0	0	348,364
2017	352,415	4,612	14,734	9,813	2,160	(3,003)	13,582	52,858	0	0	352,415
2018	355,991	4,569	15,252	9,813	2,114	(2,939)	13,557	51,163	0	0	355,991
2019	359,122	4,534	15,793	9,813	2,047	(2,845)	13,549	48,919	0	0	359,122
2020	361,778	4,477	16,369	9,813	1,957	(2,720)	13,527	46,077	0	0	361,778
2021	363,882	4,449	16,964	9,813	1,843	(2,562)	13,543	42,656	0	0	363,882
2022	365,425	4,351	17,600	9,813	1,706	(2,372)	13,498	38,554	0	0	365,425
2023	366,265	4,282	18,234	9,813	1,542	(2,144)	13,493	33,813	0	0	366,265
2024	366,406	4,228	18,858	9,813	1,353	(1,880)	13,514	28,469	0	0	366,406
2025	365,847	4,178	19,478	9,813	1,139	(1,583)	13,547	22,538	0	0	365,847
2026	364,573	4,140	20,076	9,813	902	(1,253)	13,602	16,064	0	0	364,573
2027	362,584	4,125	20,639	9,813	643	(893)	13,688	9,113	0	0	362,584
2028	359,912	4,110	21,162	9,813	365	(507)	13,781	1,732	0	0	359,912
2029	356,577	4,084	21,648	9,813	69	(96)	13,870	0	0	0	356,577
2030	352,573	4,086	22,058	9,813	0	0	13,899	0	0	0	352,573
2031	347,985	4,085	22,405	9,813	0	0	13,898	0	0	0	347,985
2032	342,852	4,086	22,682	9,813	0	0	13,899	0	0	0	342,852
2033	337,227	4,087	22,887	9,813	0	0	13,900	0	0	0	337,227
2034	331,165	4,086	23,011	9,813	0	0	13,899	0	0	0	331,165
2035	324,730	4,098	23,042	9,813	0	0	13,911	0	0	0	324,730
2036	318,019	4,107	22,988	9,813	0	0	13,920	0	0	0	318,019

EXHIBIT D

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 D

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 D

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.