LINCOLN-SUDBURY REGIONAL SCHOOL DISTRICT

OTHER POSTEMPLOYMENT BENEFITS PROGRAM

ACTUARIAL VALUATION

July 1, 2011

Prepared by:

Linda L. Bournival, FSA, EA, MAAA
KMS Actuaries, LLC
Fellow, Society of Actuaries
Enrolled Actuary
Member, American Academy of Actuaries

and

Christopher E. Bean, ASA, MAAA
DBR Group, Inc.
Associate, Society of Actuaries
Member, American Academy of Actuaries

KMS ACTUARIES LLC

November 13, 2012

Mr. Michael Connelly
Director of Finance and Operations
Lincoln-Sudbury Regional School District
390 Lincoln Road
Sudbury, MA 01776

Dear Michael:

Enclosed is our report summarizing the results of an actuarial valuation of the Lincoln-Sudbury Regional School District's Other Postemployment Benefits (OPEB) as of July 1, 2011. Our valuation was performed in accordance with the provisions contained in the GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions (GASB 45).

A summary of the valuation results are shown in Section 1. The principal results of our valuation are summarized in Section 2. The Plan Provisions and Actuarial Assumptions and Methods are shown in Sections 6 and 7, respectively. Section 8 summarizes the demographic profile of active employees and retirees.

The required disclosures under GASB 45 are presented in Section 3.

Our best estimate health care cost trend assumptions are based on recent experience and anticipated future cost increases under the Lincoln-Sudbury Regional School District medical plans. Section 5 illustrates the sensitivity of actuarial accrued liability and normal cost to a one percentage increase and decrease in the health care cost trend assumption for each future year.

Our actuarial valuation is based on a discount rate of 3.5% compounded annually. To illustrate the impact on cost of fully prefunding the District's benefit liabilities, our report also includes valuation results based on an alternative 8% discount rate.

We also provide a 30-year forecast of the Annual Required Contributions (ARC) and a 10-year forecast of the Annual OPEB Cost and the Net OPEB Obligation in Section 4.

KMS ACTUARIES
814 Elm Street, Suite 204 · Manchester, NH 03101 · p: (603) 792-9494 · f: (603) 792-9492 · lindab@kmsactuaries.com · kmsactuaries.com

Our calculations were based on participant census data and other information provided by the Lincoln-Sudbury Regional School District and the benefit provisions of your medical plans as described in your benefit summaries. Our valuation is also based on medical plan rates provided in the file "Updated Health Ins Rates 06-2012 Final.pdf".

Our valuation follows generally accepted actuarial methods and we perform such tests as we consider necessary to assure the accuracy of the results. The amounts presented in this report have been appropriately determined according to the actuarial assumptions and methods stated herein.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

We appreciate this opportunity to be of service to the Lincoln-Sudbury Regional School District. We are available to answer any questions with respect to our valuation.

Respectfully submitted,

Linda L. Bournival, FSA, EA, MAAA
Member, American Academy of Actuaries
603-792-9494

Christopher E. Bean, ASA, MAAA
Member, American Academy of Actuaries
508-628-9022

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ACTUARIAL CERTIFICATION

This report presents the results of the Actuarial Valuation for the Lincoln-Sudbury Regional School District Postemployment Benefits Other Than Pensions as of July 1, 2011. The report presents the accounting and financial reporting information in accordance with Statement Number 45 of the Governmental Accounting Standards Board (GASB 45).

This valuation was performed using employee data and financial information provided to us by the District. Although we did not audit the data used in the valuation, we believe that the information is complete and reliable.

This report was completed in accordance with generally accepted actuarial standards and procedures, and conforms to the Code of Professional Conduct of the American Academy of Actuaries. The actuarial assumptions other than those explicitly applicable to the postemployment benefit plans are consistent with those used by the Middlesex County Retirement System's actuaries for the Retirement System pension valuations.

This report is intended for the sole use of the Lincoln-Sudbury Regional School District and is intended to provide information to comply with the stated purpose of the report. It may not be appropriate for other purposes.

The undersigned credentialed actuaries are Members of the American Academy of Actuaries and together meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein. They are available to answer any questions with regard to this report.

Respectfully submitted,

Linda Bournival Christopher E. Bean

Linda L. Bournival, FSA, EA, MAAA	Christopher E. Bean, ASA, MAAA
Member, American Academy of Actuaries	Member, American Academy of Actuaries
603-792-9494	508-628-9022

SECTION 1 - SUMMARY

BACKGROUND

The Lincoln-Sudbury Regional School District provides postemployment medical benefits to District retirees and their covered dependents. The District provides benefits for any employee who retires after attaining age 55 with 10 or more years of service or any age with 20 or more years of creditable service. Medical coverage continues to the spouse after the death of the retiree provided the spouse makes the required contributions.

GASB 45

The Governmental Accounting Standards Board (GASB) is responsible for establishing accounting standards for governmental entities. Calculations developed in accordance with GASB standards are required when providing financial statements.

GASB believes that postemployment benefits are a form of deferred compensation whose cost should be recognized while the employee actually renders services rather than when the actual benefits are paid, many years later. Ideally under the GASB standard the entire postemployment liability is recognized by the time an active participant begins to receive postemployment benefits. GASB 45's focus is on postemployment benefits other than pensions, such as medical, dental and life insurance benefits. Unlike pensions where sponsors are pre-funding for benefits due in the future, the impact of GASB 45 will be to significantly increase cash pay-as-you-go expense.

The effective date for GASB 45 is a function of the District's total annual revenues in the first fiscal year ending after June 15, 1999. We understand that this is your fiscal year that ended June 30, 1999, and that your related revenues were greater than $10 million and less than $100 million. As a result, the District was required to comply with GASB 45 for the fiscal year ending June 30, 2009.

ACTUARIAL VALUATION

As of July 1, 2011, there are 157 active employees who may be eligible for benefits in the future and 151 retired employees, covered spouses and survivors who are currently receiving benefits. Coverage is for individuals and families or individuals and spouses depending on the coverage selected.

Prior to GASB 45, the annual cost recognized was the annual premiums or benefits paid plus administrative expenses less any participant contributions paid towards the coverage. Under GASB 45, an annual cost for postemployment coverage is developed for any person who is currently receiving or who is currently actively employed and may be eligible to receive benefits in the future. In developing the GASB 45 cost for the Lincoln-Sudbury Regional School District, the payment of future benefits is determined using the current schedule of premiums under the Minuteman Nashoba Health Group plans modified to reflect the population and the fact that actual healthcare expenses are higher as individuals age. These age-adjusted costs are increased in the future under the annual healthcare cost trend rate assumptions. The age-adjusted per capita costs utilized in this valuation are detailed in Section 7, Actuarial Assumptions and Methods.

It is important to understand that even though the District charges participants for coverage based on the individual or family premium schedule presented in our report, in developing a liability for the District, GASB requires that these premiums be adjusted as noted above. The plan premium represents less than 100% of the actual cost that is required to be recognized under the GASB standard.

SECTION 1 - SUMMARY

A summary of principal valuation results from the current valuation and the prior valuation follows.

Valuation Date	July 1, 2011	June 30, 2009 [1]
Summary of Member Data		
Active Members	157	173
Average Age	45.7	44.1
Average Service	11.2	9.7
Retired Members and Survivors	109	97
Average Age	73.2	71.7
Covered Spouses of Retired Members	42	53
Discount rate	3.50%	5.00%
Actuarial Accrued Liability	$46,124,163	$29,430,886
Normal Cost	$1,884,473	$940,532
Assets	$0	$0
Unfunded Actuarial Accrued Liability	$46,124,163	$29,430,886
Annual Required Contribution	$4,457,705	$2,141,000 [2]
Net OPEB Obligation/(Asset) - EOY	$5,842,679	$741,423

[1] From the June 30, 2009 valuation report prepared by the Segal Group.

[2] The June 30, 2009 valuation results were used to compute the Annual Required Contribution as of June 30, 2011.

ACTUARIAL ASSUMPTIONS

The most important assumption for GASB 45 is the discount rate, which is used to discount future benefits to current age. GASB 45 requires that the discount rate accurately reflects the rate of return on assets dedicated to paying the retiree medical benefits. This means that a traditional pay-as-you-go system, which pays benefits from the District's annual budget and not a dedicated trust, must use a discount rate close the rate of return on cash. Full pre-funding by use of a dedicated trust with a mixture of stocks and bonds can employ a higher discount rate that accurately reflects the expected return on trust assets dedicated to pay retiree medical benefits. For the Lincoln-Sudbury Regional School District, we selected a 3.5% discount rate to reflect a pay-as-you-go system with an expected return close to the rate of return on cash.

SECTION 1 - SUMMARY

CHANGES

Many assumptions used in this valuation have changed from those used in the June 30, 2009 valuation and are detailed in Section 7. The major assumption changes are summarized below:

- the discount rate for pay-as-you-go was changed from 5% to 3.5% and the discount rate for full pre-funding was changed from 8.125% to 8%.

- the health care cost trend rates were changed from 10% decreasing by .75% for 6 years and by .50% for 1 year to an ultimate rate of 5% per year to 9% decreasing by 1% per year to an ultimate rate of 5%.

- the mortality table was changed from the RP-2000 Mortality projected to 2010 using Scale AA to the RP-2000 Mortality Table projected to 2011 using Scale AA.

RESULTS

We have provided results based on a discount rate of 3.5%. As shown in Table 4.2 of Section 4, the Annual OPEB Cost for the fiscal year ending June 30, 2012 under GASB 45 is $4,419,725 and the estimated Annual OPEB Cost for the fiscal year ending June 30, 2013 under GASB 45 is $4,555,525.

The accumulated Net OPEB Obligation as of June 30, 2012 is $5,842,679 and the estimated Net OPEB Obligation as of June 30, 2013 is $9,223,026.

The Actuarial Accrued Liability (AAL) as of July 1, 2011 is $46,124,163. The AAL by status breakdown is shown below:

Actives:	$28,534,290
Retirees, Beneficiaries and Surviving Spouses:	17,589,873
Total:	$46,124,163

SECTION 1 - SUMMARY

In performing the actuarial valuation, various assumptions are made regarding future premium rates, mortality, retirement and withdrawal rates as well as investment returns. A comparison of the results of the current valuation and the prior valuation is made to determine how closely actual experience relates to expected. Below is the development of the Actuarial Gain/(Loss) for the current period:

	Year 1	Year 2
Actuarial Accrued Liability, prior valuation	$29,430,886	$30,767,325
Normal Cost, prior valuation	940,532	987,559
Expected Benefit Payments	1,095,282	1,197,732
Interest	1,491,189	1,557,801
Expected Actuarial Accrued Liability	$30,767,325	$32,114,952
Actual Actuarial Accrued Liability		$46,124,163
Gain/(Loss)		(14,009,211)

The actuarial loss of $14,009,211 was comprised of the following:

- an actuarial experience loss increased the Accrued Liability by $3,397,000 as a result of demographic changes, changes in the premium rates from the prior valuation and valuing the Medicare Part B penalty.

- changes made to the actuarial assumptions (except the discount rate) resulted in a gain that decreased the Accrued Liability by $499,000.

- decreasing the discount rate from 5% to 3.5% increased the Accrued Liability by $11,112,000.

SECTION 2 - PRINCIPAL VALUATION RESULTS

The Actuarial Value of Plan Assets is equal to the market value. The asset activity during the prior and current fiscal year is as follows:

TABLE 2.1 - OPEB TRUST ASSETS

Market Value of Assets	
Fiscal Year Ending	**June 30, 2012**
Assets as of July 1, 2011	$0
Contribution Receivable	$0
Adjusted Assets, July 1	$0
Employer Contributions	
Paid Premiums	$851,766
OPEB Trust Deposits	0
Total Employer Contributions	$851,766
Benefits Paid	(851,766)
Expenses	0
Investment Earnings	0
Assets as of June 30, 2012	$0

SECTION 2 - PRINCIPAL VALUATION RESULTS

The Actuarial Accrued Liability is the portion of the Actuarial Present Value of Future Benefits which is allocated to all periods prior to a valuation year and therefore is not provided for by future Normal Costs. Below is the Actuarial Accrued Liability assuming a discount rate of 3.5%, the rate of return on cash, and 8%, the rate of return on a dedicated trust if the District were to fully pre-fund benefits:

TABLE 2.2 - ACTUARIAL ACCRUED LIABILITY

	Pay-As-You-Go	Full Pre-Funding
Discount Rate	**3.5%**	**8.0%**
Current Active Employees		
Pre-Medicare Gross Benefit	$10,081,571	$5,629,965
Pre-Medicare Participant Contributions	3,015,389	1,685,702
Net Pre-Medicare Benefit	$7,066,182	$3,944,263
Post - Medicare Gross Benefit	$29,963,766	$10,092,142
Post - Medicare Participant Contributions	8,495,658	2,968,058
Net Post - Medicare Benefit	$21,468,108	$7,124,084
Total Current Active Employees	$28,534,290	$11,068,347
Current Retirees		
Pre-Medicare Gross Benefit	$2,087,065	$1,784,339
Pre-Medicare Participant Contributions	527,473	451,046
Net Pre-Medicare Benefit	$1,559,592	$1,333,293
Post - Medicare Gross Benefit	$20,561,293	$12,739,556
Post - Medicare Participant Contributions	4,531,012	2,798,897
Net Post - Medicare Benefit	$16,030,281	$9,940,659
Total Current Retirees	$17,589,873	$11,273,952
Total Actuarial Accrued Liability (AAL)	$46,124,163	$22,342,299

SECTION 2 - PRINCIPAL VALUATION RESULTS

The Normal Cost is the portion of the Actuarial Present Value of Future Benefits which is attributed to services rendered by active employees in the current year. Below is the Normal Cost assuming a discount rate of 3.5%, the rate of return on cash, and 8%, the rate of return on a dedicated trust if the District were to fully pre-fund benefits:

TABLE 2.3 - NORMAL COST

	Pay-As-You-Go	Full Pre-Funding
Discount Rate	**3.5%**	**8.0%**
Current Active Employees		
Pre-Medicare Gross Benefit	$719,613	$303,171
Pre-Medicare Participant Contributions	216,803	91,459
Net Pre-Medicare Benefit	$502,810	$211,712
Post - Medicare Gross Benefit	$1,928,476	$501,936
Post - Medicare Participant Contributions	546,813	147,476
Net Post - Medicare Benefit	$1,381,663	$354,460
Total Current Active Employees	$1,884,473	$566,172
Current Retirees		
Pre-Medicare Gross Benefit	$0	$0
Pre-Medicare Participant Contributions	0	0
Net Pre-Medicare Benefit	$0	$0
Post - Medicare Gross Benefit	$0	$0
Post - Medicare Participant Contributions	0	0
Net Post - Medicare Benefit	$0	$0
Total Current Retirees	$0	$0
Total Normal Cost (NC)	$1,884,473	$566,172

SECTION 2 - PRINCIPAL VALUATION RESULTS

Under GASB 45, the Annual Required Contribution (ARC) of the employer equals the Normal Cost plus a provision for amortizing the Unfunded Actuarial Accrued Liability. We have assumed level dollar amortization over the maximum acceptable amortization period of 30 years. For the period beginning July 1, 2011, the ARC, calculated under the parameters of this actuarial valuation, would be:

TABLE 2.4 - ANNUAL REQUIRED CONTRIBUTION and ANNUAL OPEB COST

		Pay-As-You-Go	Full Pre-Funding
	Discount Rate	**3.5%**	**8.0%**
1.	Normal Cost	$1,884,473	$566,172
2.	Unfunded Actuarial Accrued Liability		
a.	Actuarial Accrued Liability	$46,124,163	$22,342,299
b.	Actuarial Value of Plan Assets	$0	$0
c.	Unfunded Actuarial Accrued Liability	$46,124,163	$22,342,299
3.	Amortization of Unfunded Actuarial Accrued Liability		
a.	Unfunded Actuarial Accrued Liability	$46,124,163	$22,342,299
b.	Amortization Period in years	30	30
c.	Factor Increasing Rate	0.0%	0.0%
d.	Amortization Factor	19.04	12.16
e.	Amortization Amount (3.a. / 3.d.)	$2,422,488	$1,837,360
4.	Interest	$150,744	$192,283
5.	Annual Required Contribution (1. + 3.e. + 4.)	$4,457,705	$2,595,815
6.	Net OPEB Obligation / (Asset) beginning of year	$2,521,619	Not Applicable
7.	Interest on Net OPEB Obligation at 5.00%	$126,081	Not Applicable
8.	Adjustment to Annual Required Contribution at 5.00%	$164,061	Not Applicable
9.	Annual OPEB Cost (5. + 7. - 8.)	$4,419,725	Not Applicable

SECTION 3 - GASB 45 ACCOUNTING DISCLOSURE

GASB 45 requires disclosure of the annual OPEB cost, the Net OPEB Obligation and the Schedule of Funding Progress. In addition, information about the Actuarial Methods and Assumptions used in the valuation and a summary of the Substantive Plan Provisions are disclosed, which are provided in Section 6 and Section 7, respectively.

Annual OPEB Cost and Net OPEB Obligation

		6/30/2012	6/30/2011	6/30/2010
	Fiscal Year Ending	6/30/2012	6/30/2011	6/30/2010
	Discount rate	3.5%	5.0%	5.0%
1.	Annual Required Contribution	$4,457,705	$2,141,133	$1,825,052
2.	Interest on Net OPEB Obligation	126,081	76,518	33,364
3.	Adjustment to annual required contribution	164,061	34,857	45,517
4.	Annual OPEB cost/(expense)	$4,419,725	$2,182,794	$1,812,899
5.	Employer contributions (including subsidy)	1,098,665	1,095,282	1,120,215
6.	Change in Net OPEB Obligation	$3,321,060	$1,087,512	$692,684
7.	Net OPEB Obligation (Asset) - beginning of year	$2,521,619	$1,434,107	$741,423
8.	Net OPEB Obligation (Asset) - end of year	$5,842,679	$2,521,619	$1,434,107

Plan History

Fiscal Year Ended	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
6/30/2012	4,419,725	24.9%	5,842,679
6/30/2011	2,182,794	50.2%	2,521,619
6/30/2010	1,812,899	61.8%	1,434,107

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) / c)
7/1/2011	0	46,124,163	46,124,163	0.00%	15,479,452	298.0%
6/30/2009	0	29,430,886	29,430,886	0.00%	Not available	Not available

SECTION 4 - FORECASTS

TABLE 4.1 - ANNUAL REQUIRED CONTRIBUTIONS

FYE June 30	(1) Normal Cost	(2) Actuarial Accrued Liability	(3) Assets, BOY	(4) Unfunded Actuarial Accrued Liability (2) - (3)	(5) Expected Benefit Payments	(6) Contributions	(7) Amortization Amount	(8) Interest	(9) ARC (1) + (7) + (8)
2012	1,884,473	46,124,163	-	46,124,163	1,098,665	1,098,665	2,422,488	150,744	4,457,705
2013	1,959,852	48,571,212	-	48,571,212	1,175,178	1,175,178	2,551,009	157,880	4,668,741
2014	2,038,246	51,104,084	-	51,104,084	1,250,660	1,250,660	2,684,038	165,280	4,887,564
2015	2,119,776	53,729,953	-	53,729,953	1,346,266	1,346,266	2,821,951	172,960	5,114,687
2016	2,204,567	56,434,846	-	56,434,846	1,405,534	1,405,534	2,964,015	180,900	5,349,482
2017	2,292,750	59,261,874	-	59,261,874	1,509,026	1,509,026	3,112,493	189,184	5,594,427
2018	2,384,460	62,173,829	-	62,173,829	1,615,437	1,615,437	3,265,432	197,746	5,847,638
2019	2,479,838	65,174,365	-	65,174,365	1,652,503	1,652,503	3,423,023	206,600	6,109,461
2020	2,579,032	68,340,927	-	68,340,927	1,693,188	1,693,188	3,589,334	215,893	6,384,259
2021	2,682,193	71,679,594	-	71,679,594	1,759,960	1,759,960	3,764,685	225,641	6,672,519
2022	2,789,481	75,173,955	-	75,173,955	1,767,186	1,767,186	3,948,212	235,819	6,973,512
2023	2,901,060	78,894,311	-	78,894,311	1,845,552	1,845,552	4,143,609	246,563	7,291,232
2024	3,017,102	82,780,638	-	82,780,638	1,941,780	1,941,780	4,347,723	257,769	7,622,594
2025	3,137,786	86,825,191	-	86,825,191	2,047,412	2,047,412	4,560,147	269,428	7,967,361
2026	3,263,297	91,028,748	-	91,028,748	2,128,100	2,128,100	4,780,922	281,548	8,325,767
2027	3,393,829	95,427,245	-	95,427,245	2,201,363	2,201,363	5,011,935	294,202	8,699,966
2028	3,529,582	100,040,256	-	100,040,256	2,234,223	2,234,223	5,254,215	307,433	9,091,230
2029	3,670,765	104,921,797	-	104,921,797	2,283,424	2,283,424	5,510,599	321,348	9,502,712
2030	3,817,596	110,070,261	-	110,070,261	2,357,178	2,357,178	5,781,001	335,951	9,934,548
2031	3,970,300	115,475,858	-	115,475,858	2,403,722	2,403,722	6,064,909	351,232	10,386,441
2032	4,129,112	121,181,348	-	121,181,348	2,456,748	2,456,748	6,364,567	367,279	10,860,958
2033	4,294,276	127,196,955	-	127,196,955	2,466,583	2,466,583	6,680,512	384,118	11,358,906
2034	4,466,047	133,584,047	-	133,584,047	2,506,771	2,506,771	7,015,969	401,871	11,883,887
2035	4,644,689	140,331,585	-	140,331,585	2,555,112	2,555,112	7,370,356	420,527	12,435,572
2036	4,830,477	147,451,002	-	147,451,002	2,546,503	2,546,503	7,744,275	440,116	13,014,868
2037	5,023,696	155,020,648	-	155,020,648	2,572,528	2,572,528	8,141,841	460,794	13,626,331
2038	5,224,644	163,028,736	-	163,028,736	2,582,180	2,582,180	8,562,434	482,548	14,269,626
2039	5,433,630	171,515,269	-	171,515,269	2,570,640	2,570,640	9,008,155	505,462	14,947,247
2040	5,650,975	180,526,872	-	180,526,872	2,562,723	2,562,723	9,481,453	529,635	15,662,063
2041	5,877,014	190,086,886	-	190,086,886	2,531,710	2,531,710	9,983,555	555,120	16,415,689

30 years open, 3.5% discount rate.

SECTION 4 - FORECASTS

TABLE 4.2 - ANNUAL OPEB COST and NET OPEB OBLIGATION

FYE June 30	ARC	Interest on Net OPEB Obligation	ARC Adjustment	Amortization Factor	Annual OPEB Cost	Contributions	Change in Net OPEB Obligation	Net OPEB Obligation Balance
								2,521,619
2012	4,457,705	126,081	164,061	15.37	4,419,725	1,098,665	3,321,060	5,842,679
2013	4,668,741	204,494	317,710	18.39	4,555,525	1,175,178	3,380,347	9,223,026
2014	4,887,564	322,806	501,524	18.39	4,708,846	1,250,660	3,458,186	12,681,212
2015	5,114,687	443,842	689,571	18.39	4,868,958	1,346,266	3,522,692	16,203,903
2016	5,349,482	567,137	881,126	18.39	5,035,493	1,405,534	3,629,959	19,833,862
2017	5,594,427	694,185	1,078,513	18.39	5,210,099	1,509,026	3,701,073	23,534,935
2018	5,847,638	823,723	1,279,768	18.39	5,391,593	1,615,437	3,776,156	27,311,091
2019	6,109,461	955,888	1,485,106	18.39	5,580,243	1,652,503	3,927,740	31,238,831
2020	6,384,259	1,093,359	1,698,686	18.39	5,778,932	1,693,188	4,085,744	35,324,575
2021	6,672,519	1,236,360	1,920,858	18.39	5,988,021	1,759,960	4,228,061	39,552,636

Notes:

1. ARC and Contributions are from 30-Year Forecast of Annual Required Contribution.
2. Interest on Net OPEB Obligation is computed on the prior year Net OPEB Obligation Balance.
3. ARC Adjustment is the prior year Net OPEB Obligation Balance amortized over 30 years.
4. OPEB Cost is the ARC plus Interest on Net OPEB Obligation less ARC Adjustment.
5. Change in Net OPEB Obligation is the difference between the OPEB Cost and Contribution.
6. Net OPEB Obligation is the prior year Net OPEB Obligation Balance plus Change in Net OPEB Obligation.
7. Year one Interest on Net OPEB Obligation and ARC Adjustment computed at prior discount rate of 5.00%.
8. Subsequent years' Interest on Net OPEB Obligation and ARC Adjustment computed at current discount rate of 3.50%.

SECTION 5 - SENSITIVITY TO HEALTH CARE COST TREND RATE

Below we illustrate the sensitivity of Actuarial Accrued Liability to a one percentage increase and decrease in health care cost trend assumption for each future year:

TABLE 5.1 - ACTUARIAL ACCRUED LIABILITY

	Assumed Trend	Trend +1%	Trend -1%
Discount Rate	**3.5%**	**3.5%**	**3.5%**
Current Active Employees			
Pre-Medicare Gross Benefit	$10,081,571	$11,622,353	$8,794,283
Pre-Medicare Participant Contributions	3,015,389	3,475,336	2,631,005
Net Pre-Medicare Benefit	$7,066,182	$8,147,017	$6,163,278
Post - Medicare Gross Benefit	$29,963,766	$39,360,729	$23,073,455
Post - Medicare Participant Contributions	8,495,658	11,065,958	6,597,690
Net Post - Medicare Benefit	$21,468,108	$28,294,771	$16,475,765
Total Current Active Employees	$28,534,290	$36,441,788	$22,639,043
Current Retirees			
Pre-Medicare Gross Benefit	$2,087,065	$2,156,659	$2,021,564
Pre-Medicare Participant Contributions	527,473	544,996	510,965
Net Pre-Medicare Benefit	$1,559,592	$1,611,663	$1,510,599
Post - Medicare Gross Benefit	$20,561,293	$23,152,928	$18,373,633
Post - Medicare Participant Contributions	4,531,012	5,107,908	4,043,719
Net Post - Medicare Benefit	$16,030,281	$18,045,020	$14,329,914
Total Current Retirees	$17,589,873	$19,656,683	$15,840,513
Total Actuarial Accrued Liability (AAL)	$46,124,163	$56,098,471	$38,479,556

SECTION 5 - SENSITIVITY TO HEALTH CARE COST TREND RATE

Below we illustrate the sensitivity of Normal Cost to a one percentage increase and decrease in health care cost trend assumption for each future year:

TABLE 5.2 - NORMAL COST

	Assumed Trend	Trend +1%	Trend -1%
Discount Rate	3.5%	3.5%	3.5%
Current Active Employees			
Pre-Medicare Gross Benefit	$719,613	$883,759	$588,861
Pre-Medicare Participant Contributions	216,803	266,137	177,479
Net Pre-Medicare Benefit	$502,810	$617,622	$411,382
Post - Medicare Gross Benefit	$1,928,476	$2,694,270	$1,397,351
Post - Medicare Participant Contributions	546,813	757,612	399,518
Net Post - Medicare Benefit	$1,381,663	$1,936,658	$997,833
Total Current Active Employees	$1,884,473	$2,554,280	$1,409,215
Current Retirees			
Pre-Medicare Gross Benefit	$0	$0	$0
Pre-Medicare Participant Contributions	0	0	0
Net Pre-Medicare Benefit	$0	$0	$0
Post - Medicare Gross Benefit	$0	$0	$0
Post - Medicare Participant Contributions	0	0	0
Net Post - Medicare Benefit	$0	$0	$0
Total Current Retirees	$0	$0	$0
Total Normal Cost	$1,884,473	$2,554,280	$1,409,215

SECTION 6 - PLAN PROVISIONS

Eligibility:	Retirement after attaining age 55 with 10 or more years of service or any age with 20 or more years of creditable service.
Medical Premium Rates:	The total monthly cost by plan are shown below:

Non-Medicare Plans (June 1, 2012)	Individual	Family
Fallon Direct Care	$537.00	$1,447.00
Fallon Select Care	$578.00	$1,551.00
Harvard Pilgrim EPO Benchmark	$631.00	$1,651.00
Tufts EPO Benchmark	$613.00	$1,662.00
Tufts POS Indemnity	$1,542.00	$4,069.00
Harvard Pilgrim PPO (out-of-area subscribers)	$1,343.00	$3,547.00

Medicare Plans (January 1, 2012)	
Tufts Medicare Preferred Supplement	$341.00
Tufts Medicare Preferred HMO	$226.00
Fallon Senior Plan	$267.00

Medicare Part B: The District reimburses retirees for the Medicare Part B penalty as indicated in the submitted data.

Participant Contributions: Current retired employees contribute based on their date of retirement* as follows:

Retired prior to 9/1995	10%
Retired on or after 9/1995 and on or before 9/1996	20%
Retired after 9/1996 and on or before 9/2010	25%
Retired after 9/2010	30%

* Certain exceptions apply based on the coverage elected.

Continuation of Coverage to Spouse After Death of Retiree: Surviving spouse may continue coverage for lifetime by paying the required percentage of the medical premium rates.

SECTION 6 - PLAN PROVISIONS

Life Insurance Benefit:	Retirees are eligible for a $1,000 life insurance benefit.
Life Insurance Premium:	The total monthly cost is $.25.
Life Insurance Contributions:	The District contributes 100% of the premium for life insurance coverage.

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Valuation Date: July 1, 2011

Discount Rates: 3.50% pay-as-you-go.
8.00% full pre-funding.

Amortization Method: Level dollar amount over thirty (30) years on an open amortization period for pay-as-you-go.

Level dollar amount over thirty (30) years on a closed amortization period for full pre-funding.

Health Care Cost Trend Rates:

Year	Trend
1	9.00%
2	8.00%
3	7.00%
4	6.00%
5	5.00%
Ultimate	5.00%

Mortality Table: RP-2000 Mortality Table, projected to 2011, using Scale AA.

Turnover Rates: *Non-Teachers:*

Groups 1 and 2	
Service	Rate
0	15.00%
1	12.00%
2	10.00%
3	9.00%
4	8.00%
5-9	7.60%
10-14	5.40%
15-19	3.30%
20-24	2.00%
25-29	1.00%
30+	0.00%

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Turnover Rates: *Teachers:*

	Service					
	0		5		10+	
Age	Male	Female	Male	Female	Male	Female
20	12.0%	10.0%	4.5%	9.0%	1.0%	5.0%
30	11.4%	12.0%	4.5%	9.0%	1.0%	5.0%
40	9.7%	11.0%	5.4%	6.5%	1.7%	2.9%
50	10.0%	8.2%	4.8%	4.2%	2.2%	2.1%

Disability Rates: None.

Retirement Rates: *Non-Teachers:*

	Groups 1 and 2	
Age	Male	Female
45-49	0.00%	0.00%
50-54	0.00%	0.00%
55-59	2.00%	5.50%
60-61	12.00%	5.00%
62-64	30.00%	15.00%
65-68	40.00%	15.00%
69	50.00%	20.00%
70	100.00%	100.00%

Teachers:

	Years of Service					
	Less than 20		20-30		30+	
Age	Male	Female	Male	Female	Male	Female
45	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50	0.0%	0.0%	1.0%	1.5%	2.0%	2.0%
55	3.0%	2.0%	3.0%	3.0%	6.0%	6.0%
60	15.0%	20.0%	20.0%	16.0%	50.0%	35.0%
62	20.0%	25.0%	30.0%	30.0%	40.0%	40.0%
65	40.0%	30.0%	40.0%	30.0%	50.0%	35.0%
69	40.0%	30.0%	30.0%	30.0%	50.0%	30.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Medical Plan Participation: 100% of eligible retirees will elect to participate.

Medicare Part B Penalty Reimbursement: 25% of future eligible retirees will receive reimbursement of $55 per month for the Medicare Part B penalty.

Life Insurance Participation: 100% of eligible retirees will elect to participate.

Dependent Status: Male spouses are assumed to be three years older and female spouses are assumed to be three years younger than the retired employee.

65% of employees are assumed to retire with a covered spouse.

Medical Per Capita Costs: Annual per capita costs for the fiscal year beginning July 1, 2011 are as follows:

Age	Cost
Under 55	$11,308
55-59	$13,417
60-64	$16,292
65-69	$5,750
70-74	$6,569
75-79	$7,324
80-84	$7,851
85-89	$8,129
90+	$8,211

Retiree Contributions: Annual per capita participant contributions for the fiscal year beginning July 1, 2011 are as follows:

Retirees Contributing	Under 65	65 and Older
10%	$875	$691
20%	$1,749	$1,382
25%	$2,187	$1,728
30%	$2,624	$2,074

Actuarial Cost Method: Projected Unit Credit. The costs of each employee's postemployment benefits are allocated on a pro rata basis from the employee's date of hire to the date the employee is fully eligible for benefits.

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Employee Data: Employee and retiree data were submitted by the District. We made reasonable adjustments for missing or invalid data.

2 employees hired after the valuation date of July 1, 2011 were assumed hired on the valuation date.

SECTION 8 - PLAN MEMBER INFORMATION

TABLE 8.1 - ACTIVE EMPLOYEES BY AGE and YEARS OF SERVICE AS OF JULY 1, 2011

	Years of Service										
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total	Percent
Under 25	4	0	0	0	0	0	0	0	0	4	3%
25 to 29	8	1	0	0	0	0	0	0	0	9	6%
30 to 34	12	10	3	0	0	0	0	0	0	25	16%
35 to 39	3	7	4	0	0	0	0	0	0	14	9%
40 to 44	1	7	8	4	1	0	0	0	0	21	13%
45 to 49	3	7	6	4	2	0	0	0	0	22	14%
50 to 54	1	5	6	2	3	3	0	0	0	20	13%
55 to 59	2	7	8	4	2	3	1	0	0	27	17%
60 to 64	1	4	3	0	3	1	0	1	0	13	8%
65 to 69	0	0	1	0	0	0	0	1	0	2	1%
70 & up	0	0	0	0	0	0	0	0	0	0	0%
Total	35	48	39	14	11	7	1	2	0	157	
Percent	22%	31%	25%	9%	7%	4%	1%	1%	0%		100%

Average Age: 45.7 Average Service: 11.2

SECTION 8 - PLAN MEMBER INFORMATION

TABLE 8.2 - RETIRED PLAN PARTICIPANTS and SURVIVORS AS OF JULY 1, 2011

Age	Fallon Select Care	Harvard Pilgrim EPO	Tufts EPO Benchmark Plan	Tufts POS	Harvard Pilgrim PPO	Tufts Medicare Preferred Supplement	Tufts Medicare Preferred HMO	Total
Under 40	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0
45 to 49	0	0	1	0	0	0	0	1
50 to 54	0	0	0	0	0	0	0	0
55 to 59	0	0	2	0	0	0	0	2
60 to 64	2	6	9	2	2	0	0	21
65 to 69	0	4	1	2	0	11	6	24
70 to 74	0	0	1	0	1	10	3	15
75 to 79	0	0	0	0	1	12	4	17
80 to 84	0	2	2	0	1	7	2	14
85 to 89	0	0	0	0	0	7	0	7
90+	0	0	1	0	0	7	0	8
Total	2	12	17	4	5	54	15	109
Covered Spouses	2	3	5	0	3	22	7	42

* In addition, there are 3 retirees with life insurance coverage only.

SECTION 9 - GASB 45 GLOSSARY OF TERMS

Actuarial Accrued Liability – The portion of the Actuarial Present Value of future benefits which is allocated to all periods prior to a valuation year and therefore is not provided by future Normal Costs.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting OPEB costs, such as mortality, withdrawal, disablement and retirement; changes in compensation and Government provided pension benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

Actuarial Present Value of Future Benefits – The present value of the cost to finance all benefits payable in the future, discounted to reflect the probability of payment and the time value of money.

Actuarial Valuation – the determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets and related Actuarial Present Values for an OPEB plan.

Actuarial Value of Assets – The value of plan assets used in an actuarial valuation. The Actuarial Value of Assets may reflect smoothing techniques intended to dampen year-to-year fluctuations in the market value of assets.

Annual OPEB Cost - The accrual basis annual cost for the OPEB plan sponsored by the employer. In the year of implementation of GASB 45, the Annual OPEB Cost equals the ARC. In subsequent years, if an employer has a Net OPEB Obligation, Annual OPEB Cost equals the ARC plus one year's interest on the Net OPEB Obligation plus an adjustment to the ARC.

Annual Required Contribution (ARC) – Includes the employer's Normal Cost and a provision for amortizing the Unfunded Actuarial Accrued Liability.

Explicit Subsidy – The difference between (a) the blended rates based on combined active and retired member experience and (b) actual cash contributions made by the employer.

Funded Ratio – The Actuarial Value of Assets expressed as a percentage of the Actuarial Accrued Liability.

Health Cost Trend Rate – The rate of change in per capita health claims cost over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

Implicit Subsidy – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group and (b) the blended rates based on combined active and retired member experience.

SECTION 9 - GASB 45 GLOSSARY OF TERMS

Net OPEB Obligation – The cumulative excess since adoption of GASB 45 of Annual OPEB Cost over the employer's contributions to the plan.

Normal Cost – The portion of the Actuarial Present Value of Future Benefits which is allocated to a valuation year.

OPEB – Other Postemployment Benefits including medical, dental, vision, hearing and life insurance benefits.

Plan Assets – Investments segregated and restricted in a trust or similar arrangement under which:

- employer contributions to the trust are irrevocable,
- assets are dedicated to providing plan benefits, and
- assets are legally protected from creditors.

Pay-As-You-Go – A method of financing an OPEB plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Present Value of Future Benefits – The actuarial present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

Projected Unit Credit Actuarial Cost Method – A method under which the projected benefits of each individual included in an Actuarial Valuation are allocated by a consistent formula to valuation years. Projected Unit Credit is one of the actuarial cost methods allowed and most often used for developing liabilities under GASB 45.

Substantive Plan – The terms of an OPEB plan as understood by the employer and plan members.

Unfunded Actuarial Accrued Liability – The excess of Actuarial Accrued Liability over the Actuarial Value of Assets.