

**Acton-Boxborough Regional School District  
and Town of Acton**

*Actuarial Valuation and Review of Other Postemployment  
Benefits (OPEB) as of December 31, 2010  
In Accordance with GASB Statements Number 43 and 45*

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*October 18, 2011*

*Stephen Barrett, CPA  
Finance Director  
Town of Acton  
472 Main Street  
Acton, MA 01720*

*Mr. Donald Aicardi  
Director of Finance  
Acton-Boxborough Regional School District  
16 Charter Road  
Acton, MA 01720-2995*

*Dear Mr. Barrett and Mr. Aicardi:*


*We are pleased to submit this report on our actuarial valuation of postemployment welfare benefits as of December 31, 2010 under GASB Statements Number 43 and 45. It establishes the liabilities of the postemployment welfare benefit plan in accordance with GASB Statements Number 43 and 45 for the fiscal year beginning July 1, 2010 and summarizes the actuarial data.*

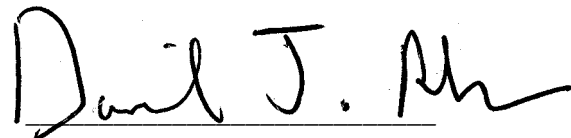
*This report is based on information received from the Acton-Boxborough Regional School District and the Town of Acton. The actuarial projections were based on the assumptions and methods described in Exhibit II and on the plan of benefits as summarized in Exhibit III.*

*We look forward to discussing this material with you at your convenience.*

*Sincerely,*

*THE SEGAL COMPANY*

By:   
*Kathleen A. Riley, FSA, MAAA, EA  
Senior Vice President and Actuary*

  
*Daniel J. Rhodes, ASA, FCA, MAAA  
Consulting Actuary*

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Measurement under GASB**

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**PURPOSE**

This report presents the results of our actuarial valuation of the Acton-Boxborough Regional School District and the Town of Acton (the “Employer”) postemployment welfare benefit plan as of December 31, 2010. The results are in accordance with the Governmental Accounting Standards, which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants’ active working lifetimes. The accounting standard supplements cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (*i.e.*, a pay-as-you-go basis).

**HIGHLIGHTS OF THE VALUATION**

During the fiscal year ending June 30, 2011, we project the School District will pay benefits (net of retiree contributions) on behalf of retired employees of about \$967,000 and the Town will pay about \$1,221,000. This amount is less than the annual “cost” (the “Annual Required Contribution”, or ARC) under the new accounting rules of \$3,408,000 for the School District and \$4,072,000 for the Town.

The GASB statements provide the method for selecting the investment return assumption (discount rate). If the benefits are funded, the discount rate should be based on the estimated long-term investment yield on the investments expected to be used to finance the payment of benefits. If financing is on a pay-as-you-go basis, the discount rate should be based on the expected yield on the assets of the employer.

Because the benefits are not being funded, we have used a 4.50% discount rate (referred to as the pay-as-you-go interest rate). For illustrative purposes, we have also shown what the

obligations would be on a fully funded basis, assuming an interest rate of 8.125%.

The GASB statements allow the use of one of six funding methods to determine the actuarial liabilities. We have used the projected unit credit cost method.

To determine the amortization payment on the unfunded actuarial accrued liability (UAAL), an amortization period and amortization method must be selected. We have used a 30-year open amortization of the UAAL (the maximum permitted by the GASB statements), with payments increasing at 3.5% year. The GASB statements allow for either an open or closed amortization period. In open amortization, the period is reset to the initial value every year and the UAAL is reamortized, while under a closed amortization, the remaining period decreases and the UAAL is eventually “paid off.”

To be considered a funded plan, the “contribution in relation to the ARC” must equal the ARC. For example, if the ARC is \$2,730,000, and the employer pays benefits to retirees of \$1,221,000, then an additional contribution of the difference, or approximately \$1,509,000 will need to be added to an OPEB trust fund during the fiscal year ending June 30, 2011.

Pages 10 and 11 show a funding schedule using the 8.125% funding assumption and a 30-year closed amortization. These are an illustration of how assets and liabilities would increase if the Town or School District were to fund the “additional funding” amount shown on the schedule. Pages 12 and 13 are similar illustrations of how the pay-as-you-go liabilities and the ARC will change over time.

If the benefits are funded in the future, assets set aside to fund OPEB liabilities would have to be held in a trust or equivalent arrangement, through which assets are accumulated and

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benefits are paid as they come due. Employer contributions to the trust will be irrevocable, trust assets will be dedicated to providing benefits to retirees and their spouses in accordance with the terms of the plan, and trust assets will be legally protected from creditors of the employer.

GASB guidelines prohibit the offset of OPEB obligations by the future value of Medicare Part D subsidies. Therefore, these calculations do not include an estimate for retiree prescription drug plan federal subsidies that the Employer may be eligible to receive for plan years beginning in 2006.

Employer decisions regarding plan design, cost sharing between the Employer and its retirees, actuarial cost method, amortization techniques, and integration with Medicare are just some of the decisions that affect the magnitude of OPEB obligations. We are available to assist you with any investigation of such options you may wish to undertake.

The Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 creates a temporary reinsurance program for eligible health care coverage for pre-Medicare retirees over age 55. The program will reimburse the plan sponsor for 80% of the retiree claims between \$15,000 and \$90,000. Due to the short nature of this program, the limited financing, and uncertainty of qualifying and receiving payment (the program will be on a first come first served basis until financing runs out), we have not reflected the value of this program in the valuation. Additional provisions of these Acts that may affect retiree health benefits in the future have not been reflected.

**KEY VALUATION RESULTS**

- The **unfunded actuarial accrued liability (UAAL)** as of December 31, 2010 is \$43,598,000 for the Acton-Boxborough Regional School District and \$57,331,000 for the Town of Acton. Going forward, net unfunded plan obligations will be expected to change due to normal plan operations, which consist of continuing accruals for active members, plus interest on the total actuarial accrued liability, less expected benefit payments and contributions. Future valuations will analyze the difference between actual and expected unfunded actuarial accrued liabilities.
  - As of December 31, 2010 the ratio of assets to the AAL (the funded ratio) is 0.0%.
- The **Annual Required Contribution (ARC)** for fiscal year 2011 is \$3,408,000 for the Acton-Boxborough Regional School District and \$4,072,000 for the Town of Acton. The ARC is expected to remain relatively level as a percentage of payroll, as long as the ARC is fully funded each year. If the ARC is not fully funded, it may be expected to increase as a percentage of payroll over time.

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**ACCOUNTING REQUIREMENTS**

The Governmental Accounting Standards Board (GASB) issued Statement Number 43 -- *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and Statement Number 45 – *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Under these statements, all state and local governmental entities that provide other post employment benefits (OPEB) are required to report the cost of these benefits on their financial statements.

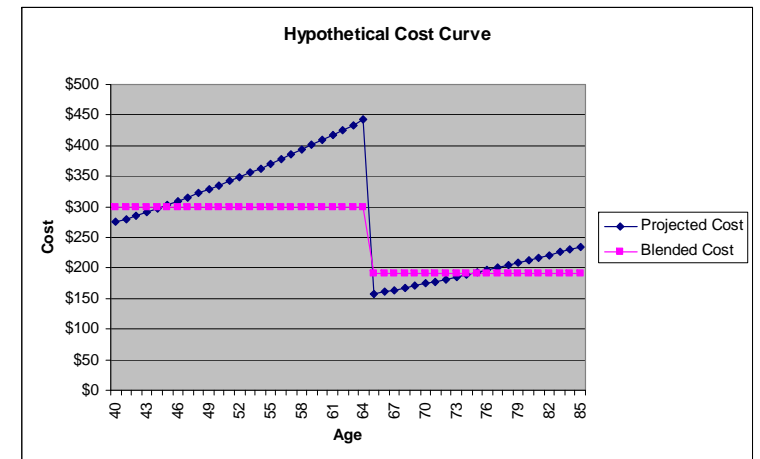
The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. These benefits, referred to as OPEB, are typically financed on a pay-as-you-go basis. The new standard introduces an accrual-basis accounting requirement; thereby recognizing the employer cost of postemployment benefits over an employee’s career. The standards also introduce a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the net OPEB obligation (NOO). In addition, required supplementary information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan.

The benefits valued in this report are limited to those described in Exhibit III of Section 4.

The following graph illustrates why a significant accounting obligation may exist even though the retiree contributes most or all of the blended premium cost of the plan. The average cost for retirees is likely to exceed the average cost for the whole group, leading to an implicit subsidy for these retirees. The accounting standard requires the employer to identify and account for this implicit subsidy as well as any explicit subsidies the employer may provide.



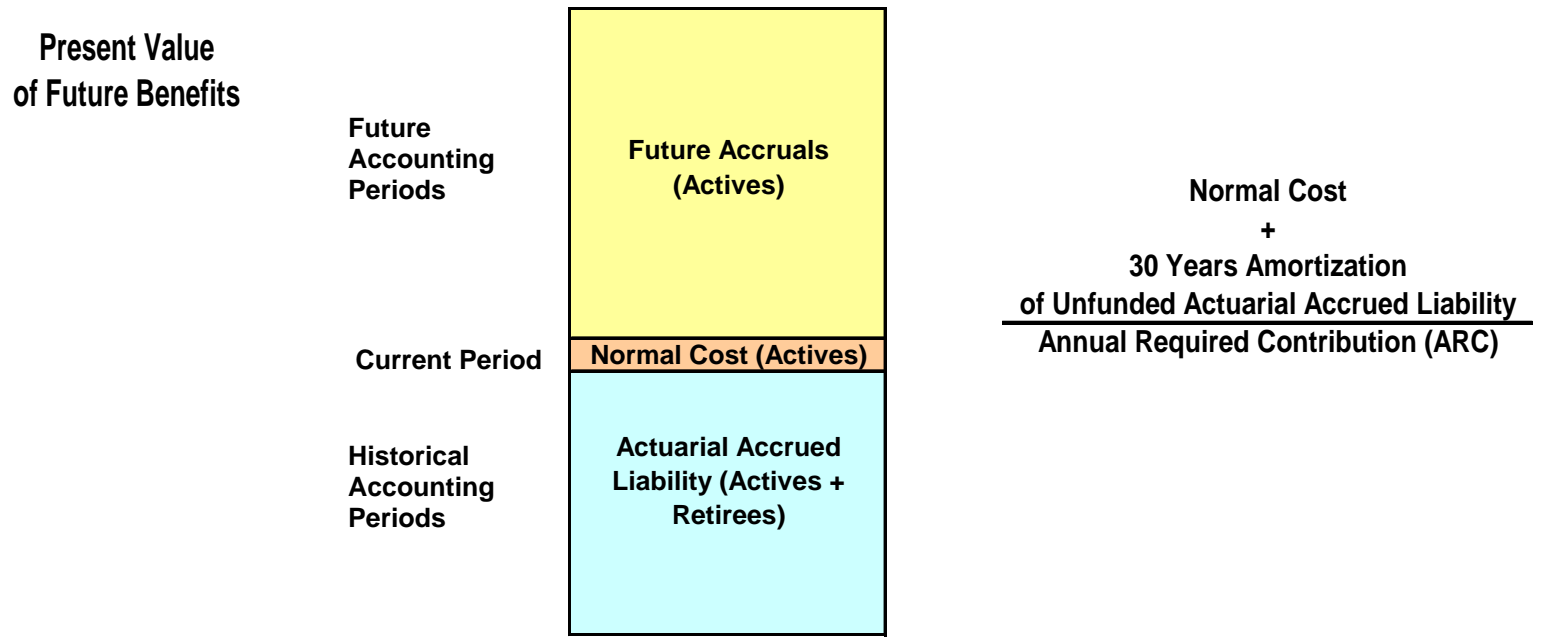
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This graph shows how the actuarial present value of the total projected benefits (APB) is broken down and allocated to various accounting periods.

The exact breakdown depends on the actuarial cost method and amortization methods selected by the employer.

**GASB 43/45 Measurement**



$$\text{Net OPEB Obligation} = \text{ARC}_1 + \text{ARC}_2 + \text{ARC}_3 + \dots - \text{Contribution}_1 - \text{Contribution}_2 - \text{Contribution}_3 - \dots$$

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Actuarial computations under GASB statements are for purposes of fulfilling certain welfare plan accounting requirements. The calculations shown in this report have been made on a basis consistent with our understanding of GASB. Determinations for purposes other than meeting the financial accounting requirements of GASB may differ significantly from the results reported here.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits does not incorporate the potential effect of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short term volatility in accrued liabilities and the actuarial value of assets, if any.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.



**SECTION 2: Valuation Results for the Acton-Boxborough Regional School District and the Town of Acton  
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**SUMMARY OF VALUATION RESULTS – ACTON-BOXBOROUGH REGIONAL SCHOOL DISTRICT**

*The key results and significant assumptions for the current year are shown on a funded and pay-as-you-go basis.*

	<b>Funded (8.125% discount rate)</b>	<b>Pay-as-you-go (4.50% discount rate)</b>
<b>Actuarial Accrued Liability by Participant Category</b>		
1. Current retirees, beneficiaries and dependents	\$11,721,942	\$16,667,580
2. Current active employees	<u>14,069,750</u>	<u>26,930,861</u>
3. Total as of December 31, 2010: (1) + (2)	\$25,791,692	\$43,598,441
4. Actuarial value of assets as of December 31, 2010	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL) as of December 31, 2010: (3) – (4)	\$25,791,692	\$43,598,441
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2011</b>		
6. Normal Cost as of December 31, 2010	\$753,946	\$1,742,804
7. 30-year increasing amortization (3.5% per year) of the UAAL as of December 31, 2010	<u>1,510,068</u>	<u>1,664,937</u>
8. Total Annual Required Contribution (ARC): (6) + (7)	\$2,264,014	\$3,407,741
9. Total projected benefit payments	967,205	967,205

*Note: Assumes payment in the middle of the fiscal year.*

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**SUMMARY OF VALUATION RESULTS – TOWN OF ACTON**

*The key results and significant assumptions for the current year are shown on a funded and pay-as-you-go basis.*

	<b>Funded (8.125% discount rate)</b>	<b>Pay-as-you-go (4.50% discount rate)</b>
<b>Actuarial Accrued Liability by Participant Category</b>		
1. Current retirees, beneficiaries and dependents	\$14,840,836	\$21,242,897
2. Current active employees	<u>18,373,329</u>	<u>36,087,961</u>
3. Total as of December 31, 2010: (1) + (2)	\$33,214,165	\$57,330,858
4. Actuarial value of assets as of December 31, 2010	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL) as of December 31, 2010: (3) – (4)	\$33,214,165	\$57,330,858
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2011</b>		
6. Normal Cost as of December 31, 2010	\$785,645	\$1,882,253
7. 30-year increasing amortization (3.5% per year) of the UAAL as of December 31, 2010	<u>1,944,644</u>	<u>2,189,351</u>
8. Total Annual Required Contribution (ARC): (6) + (7)	\$2,730,289	\$4,071,604
9. Total projected benefit payments	1,220,984	1,220,984

*Note: Assumes payment in the middle of the fiscal year.*

**SECTION 2: Valuation Results for the Acton-Boxborough Regional School District and the Town of Acton  
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**DEPARTMENT RESULTS – TOWN OF ACTON**

**Actuarial Accrued Liability (AAL) and Annual Required Contribution - Funded (8.125% discount rate)**

	<b>Council on Aging</b>	<b>NESWC</b>	<b>Nursing</b>	<b>Public Schools</b>	<b>Septage</b>	<b>Sewerage</b>	<b>All Other</b>	<b>Total</b>
<b>Actuarial Accrued Liability by Participant Category</b>								
1. Current retirees, beneficiaries and dependents	\$66,945	\$87,944	\$45,954	\$8,070,077	\$0	\$0	\$6,569,916	\$14,840,836
2. Current active employees	<u>140,054</u>	<u>51,022</u>	<u>256,378</u>	<u>8,829,513</u>	<u>114,623</u>	<u>53,218</u>	<u>8,928,521</u>	<u>18,373,329</u>
3. Total as of December 31, 2010: (1) + (2)	\$206,999	\$138,966	\$302,332	\$16,899,590	\$114,623	\$53,218	\$15,498,437	\$33,214,165
4. Actuarial value of assets as of December 31, 2010	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL) as of December 31, 2010: (3) – (4)	\$206,999	\$138,966	\$302,332	\$16,899,590	\$114,623	\$53,218	\$15,498,437	\$33,214,165
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2011</b>								
6. Normal Cost as of December 31, 2010	\$6,642	\$0	\$12,504	\$488,791	\$0	\$5,845	\$271,863	\$785,645
7. 30-year increasing amortization (3.5% per year) of the UAAL as of December 31, 2010	<u>12,120</u>	<u>8,136</u>	<u>17,701</u>	<u>989,448</u>	<u>6,711</u>	<u>3,116</u>	<u>907,412</u>	<u>1,944,644</u>
8. Total Annual Required Contribution (ARC): (6) + (7)	\$18,762	\$8,136	\$30,205	\$1,478,239	\$6,711	\$8,961	\$1,179,275	\$2,730,289
9. Total projected benefit payments	5,643	14,552	6,148	690,580	1,488	38	502,534	1,220,984

*Note: Assumes payment in the middle of the fiscal year.*

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**DEPARTMENT RESULTS – TOWN OF ACTON**

**Actuarial Accrued Liability (AAL) and Annual Required Contribution – Pay-As-You-Go (4.50% discount rate)**

	<b>Council on Aging</b>	<b>NESWC</b>	<b>Nursing</b>	<b>Public Schools</b>	<b>Septage</b>	<b>Sewerage</b>	<b>All Other</b>	<b>Total</b>
<b>Actuarial Accrued Liability by Participant Category</b>								
1. Current retirees, beneficiaries and dependents	\$90,170	\$124,277	\$57,532	\$11,506,342	\$0	\$0	\$9,464,576	\$21,242,897
2. Current active employees	<u>259,088</u>	<u>65,783</u>	<u>486,374</u>	<u>16,714,773</u>	<u>179,529</u>	<u>82,120</u>	<u>18,300,294</u>	<u>36,087,961</u>
3. Total as of December 31, 2010: (1) + (2)	\$349,258	\$190,060	\$543,906	\$2,221,115	\$179,529	\$82,120	\$27,764,870	\$57,330,858
4. Actuarial value of assets as of December 31, 2010	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL) as of December 31, 2010: (3) – (4)	\$349,258	\$190,060	\$543,906	\$28,221,115	\$179,529	\$82,120	\$27,764,870	\$57,330,858
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2011</b>								
6. Normal Cost as of December 31, 2010	\$13,327	\$0	\$26,895	\$1,112,505	\$0	\$9,019	\$720,507	\$1,882,253
7. 30-year increasing amortization (3.5% per year) of the UAAL as of December 31, 2010	<u>13,337</u>	<u>7,258</u>	<u>20,771</u>	<u>1,077,708</u>	<u>6,856</u>	<u>3,136</u>	<u>1,060,285</u>	<u>2,189,351</u>
8. Total Annual Required Contribution (ARC): (6) + (7)	\$26,664	\$7,258	\$47,666	\$2,190,213	\$6,856	\$12,155	\$1,780,792	\$4,071,604
9. Total projected benefit payments	5,643	14,552	6,148	690,580	1,488	38	502,534	1,220,984

*Note: Assumes payment in the middle of the fiscal year.*

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**FUNDING SCHEDULE – ACTON-BOXBOROUGH REGIONAL SCHOOL DISTRICT**

**30 Years Closed (8.125% discount rate, payments increasing at 3.5%)**

(1) Fiscal Year Ended June 30	(2) Projected Benefit Payments	(3) Normal Cost	(4) Amortization Requirement: of UAAL	(5) Total Funding Requirement: (3) + (4)	(6) Additional Funding: (5) – (2)	(7) Assets at End of Year	(8) AAL at Mid-Year	(9) UAAL at Mid-Year: (8) – (7)
2011	\$967,205	\$753,946	\$1,510,068	\$2,264,014	\$1,296,809	\$1,402,175	\$27,656,681	\$26,254,506
2012	1,119,128	791,643	1,562,920	2,354,563	1,235,435	2,851,916	29,549,693	26,697,777
2013	1,296,016	831,225	1,617,622	2,448,847	1,152,831	4,330,133	31,448,050	27,117,917
2014	1,465,056	872,786	1,674,239	2,547,025	1,081,969	5,851,835	33,362,812	27,510,977
2015	1,640,747	916,425	1,732,837	2,649,262	1,008,515	7,417,753	35,290,367	27,872,614
2016	1,800,178	962,246	1,793,486	2,755,732	955,554	9,053,638	37,251,695	28,198,057
2017	1,974,128	1,010,358	1,856,258	2,866,616	892,488	10,754,249	39,236,319	28,482,070
2018	2,127,363	1,060,876	1,921,227	2,982,103	854,740	12,552,219	41,271,131	28,718,912
2019	2,244,466	1,113,920	1,988,470	3,102,390	857,924	14,499,717	43,402,008	28,902,291
2020	2,373,055	1,169,616	2,058,066	3,227,682	854,627	16,601,884	45,627,203	29,025,319
2021	2,506,722	1,228,097	2,130,098	3,358,195	851,473	18,871,442	47,951,900	29,080,458
2022	2,632,058	1,289,502	2,204,651	3,494,153	862,095	21,336,887	50,396,353	29,059,466
2023	2,763,661	1,353,977	2,281,814	3,635,791	872,130	24,013,500	52,966,836	28,953,336
2024	2,901,844	1,421,676	2,361,677	3,783,353	881,509	26,917,728	55,669,960	28,752,232
2025	3,046,936	1,492,760	2,444,336	3,937,096	890,160	30,067,279	58,512,691	28,445,412
2026	3,199,282	1,567,398	2,529,888	4,097,286	898,004	33,481,212	61,502,373	28,021,161
2027	3,359,247	1,645,768	2,618,434	4,264,202	904,955	37,180,043	64,646,742	27,466,699
2028	3,527,209	1,728,056	2,710,079	4,438,135	910,926	41,185,860	67,953,956	26,768,096
2029	3,703,569	1,814,459	2,804,932	4,619,391	915,822	45,522,444	71,432,615	25,910,171
2030	3,888,748	1,905,182	2,903,105	4,808,287	919,539	50,215,394	75,091,784	24,876,390
2031	4,083,185	2,000,441	3,004,714	5,005,155	921,970	55,292,275	78,941,025	23,648,750
2032	4,287,345	2,100,463	3,109,879	5,210,342	922,997	60,782,763	82,990,417	22,207,654
2033	4,501,712	2,205,486	3,218,725	5,424,211	922,499	66,718,815	87,250,594	20,531,779
2034	4,726,797	2,315,760	3,331,380	5,647,140	920,343	73,134,840	91,732,771	18,597,931
2035	4,963,137	2,431,548	3,447,978	5,879,526	916,389	80,067,891	96,448,778	16,380,887
2036	5,211,294	2,553,125	3,568,657	6,121,782	910,488	87,557,872	101,411,096	13,853,224
2037	5,471,859	2,680,781	3,693,560	6,374,341	902,482	95,647,758	106,632,894	10,985,136
2038	5,745,452	2,814,820	3,822,835	6,637,655	892,203	104,383,833	112,128,071	7,744,238
2039	6,032,724	2,955,561	3,956,634	6,912,195	879,471	113,815,947	117,911,294	4,095,347
2040	6,334,361	3,103,339	4,095,347	7,198,686	864,325	123,997,794	123,997,794	-

*Note: Assumes payment in the middle of the fiscal year.*

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December 31, 2010 Measurement under GASB**

**FUNDING SCHEDULE – TOWN OF ACTON**

**30 Years Closed (8.125% discount rate, payments increasing at 3.5%)**

(1) Fiscal Year Ended June 30	(2) Projected Benefit Payments	(3) Normal Cost	(4) Amortization Requirement: of UAAL	(5) Total Funding Requirement: (3) + (4)	(6) Additional Funding: (5) – (2)	(7) Assets at Mid-Year	(8) AAL at Mid-Year	(9) UAAL at Mid-Year: (8) – (7)
2011	\$1,220,984	\$785,645	\$1,944,644	\$2,730,289	\$1,509,305	\$1,631,936	\$35,442,106	\$33,810,170
2012	1,405,213	824,927	2,012,707	2,837,634	1,432,421	3,313,336	37,694,343	34,381,007
2013	1,642,751	866,173	2,083,152	2,949,325	1,306,574	4,995,278	39,917,333	34,922,055
2014	1,859,715	909,482	2,156,062	3,065,544	1,205,829	6,704,947	42,133,177	35,428,230
2015	2,032,450	954,956	2,231,524	3,186,480	1,154,030	8,497,519	44,391,457	35,893,938
2016	2,207,820	1,002,704	2,309,627	3,312,331	1,104,511	10,382,195	46,695,231	36,313,036
2017	2,420,807	1,052,839	2,390,464	3,443,303	1,022,496	12,331,322	49,010,103	36,678,781
2018	2,590,891	1,105,481	2,474,130	3,579,611	988,720	14,402,295	51,386,074	36,983,779
2019	2,725,590	1,160,755	2,560,725	3,721,480	995,890	16,649,288	53,869,215	37,219,927
2020	2,880,500	1,218,793	2,650,350	3,869,143	988,643	19,071,013	56,449,368	37,378,355
2021	3,040,104	1,279,733	2,743,112	4,022,845	982,741	21,683,122	59,132,478	37,449,356
2022	3,192,109	1,343,720	2,839,121	4,182,841	990,732	24,516,105	61,938,421	37,422,316
2023	3,351,715	1,410,906	2,938,490	4,349,396	997,681	27,586,781	64,872,418	37,285,637
2024	3,519,300	1,481,451	3,041,337	4,522,788	1,003,488	30,913,228	67,939,878	37,026,650
2025	3,695,265	1,555,524	3,147,784	4,703,308	1,008,043	34,514,874	71,146,398	36,631,524
2026	3,880,029	1,633,300	3,257,956	4,891,256	1,011,227	38,412,597	74,497,767	36,085,170
2027	4,074,030	1,714,965	3,371,984	5,086,949	1,012,919	42,628,839	77,999,972	35,371,133
2028	4,277,731	1,800,713	3,490,003	5,290,716	1,012,985	47,187,722	81,659,194	34,471,472
2029	4,491,618	1,890,749	3,612,153	5,502,902	1,011,284	52,115,175	85,481,814	33,366,639
2030	4,716,199	1,985,286	3,738,578	5,723,864	1,007,665	57,439,071	89,474,412	32,035,341
2031	4,952,009	2,084,550	3,869,428	5,953,978	1,001,969	63,189,375	93,643,768	30,454,393
2032	5,199,609	2,188,778	4,004,858	6,193,636	994,027	69,398,303	97,996,863	28,598,560
2033	5,459,590	2,298,217	4,145,028	6,443,245	983,655	76,100,492	102,540,874	26,440,382
2034	5,732,569	2,413,128	4,290,104	6,703,232	970,663	83,333,186	107,283,174	23,949,988
2035	6,019,198	2,533,784	4,440,258	6,974,042	954,844	91,136,432	112,231,328	21,094,896
2036	6,320,158	2,660,473	4,595,667	7,256,140	935,982	99,553,298	117,393,089	17,839,791
2037	6,636,165	2,793,497	4,756,515	7,550,012	913,847	108,630,101	122,776,393	14,146,292
2038	6,967,974	2,933,172	4,922,993	7,856,165	888,191	118,416,653	128,389,345	9,972,692
2039	7,316,372	3,079,831	5,095,298	8,175,129	858,757	128,966,537	134,240,219	5,273,682
2040	7,682,191	3,233,823	5,273,682	8,507,505	825,314	140,337,386	140,337,386	-

*Note: Assumes payment in the middle of the fiscal year.*

**SECTION 2: Valuation Results for the Acton-Boxborough Regional School District and the Town of Acton  
December 31, 2010 Measurement under GASB**

**PROJECTION OF ARC – ACTON-BOXBOROUGH REGIONAL SCHOOL DISTRICT**

**30 Years Open (4.50% discount rate, payments increasing at 3.50%)**

<b>Fiscal Year Ended June 30</b>	<b>(1) Projected Benefit Payments</b>	<b>(2) Normal Cost</b>	<b>(3) Amortization of UAAL</b>	<b>(4) ARC</b>	<b>(5) Additional Funding (4) - (1)</b>	<b>(6) Assets at Mid-Year</b>	<b>(7) AAL at Mid-Year</b>	<b>(8) UAAL at Mid- Year (7) – (6)</b>
2011	\$967,205	\$1,742,804	\$1,664,937	\$3,407,741	\$0	\$0	\$46,370,872	\$46,370,872
2012	1,119,128	1,829,944	1,770,811	3,600,755	-	-	49,200,364	49,200,364
2013	1,296,016	1,921,441	1,878,863	3,800,304	-	-	52,067,950	52,067,950
2014	1,465,056	2,017,513	1,988,371	4,005,884	-	-	54,988,325	54,988,325
2015	1,640,747	2,118,389	2,099,894	4,218,283	-	-	57,961,936	57,961,936
2016	1,800,178	2,224,308	2,213,450	4,437,758	-	-	61,013,439	61,013,439
2017	1,974,128	2,335,523	2,329,981	4,665,504	-	-	64,136,702	64,136,702
2018	2,127,363	2,452,299	2,449,252	4,901,551	-	-	67,362,412	67,362,412
2019	2,244,466	2,574,914	2,572,435	5,147,349	-	-	70,739,039	70,739,039
2020	2,373,055	2,703,660	2,701,382	5,405,042	-	-	74,267,778	74,267,778
2021	2,506,722	2,838,843	2,836,137	5,674,980	-	-	77,956,894	77,956,894
2022	2,632,058	2,980,785	2,977,017	5,957,802	-	-	81,829,374	81,829,374
2023	2,763,661	3,129,824	3,124,900	6,254,724	-	-	85,894,336	85,894,336
2024	2,901,844	3,286,315	3,280,132	6,566,447	-	-	90,161,353	90,161,353
2025	3,046,936	3,450,631	3,443,081	6,893,712	-	-	94,640,475	94,640,475
2026	3,199,282	3,623,163	3,614,130	7,237,293	-	-	99,342,252	99,342,252
2027	3,359,247	3,804,321	3,793,681	7,598,002	-	-	104,277,756	104,277,756
2028	3,527,209	3,994,537	3,982,158	7,976,695	-	-	109,458,613	109,458,613
2029	3,703,569	4,194,264	4,180,005	8,374,269	-	-	114,897,027	114,897,027
2030	3,888,748	4,403,977	4,387,687	8,791,664	-	-	120,605,808	120,605,808
2031	4,083,185	4,624,176	4,605,694	9,229,870	-	-	126,598,405	126,598,405
2032	4,287,345	4,855,385	4,834,539	9,689,924	-	-	132,888,935	132,888,935
2033	4,501,712	5,098,154	5,074,762	10,172,916	-	-	139,492,219	139,492,219
2034	4,726,797	5,353,062	5,326,928	10,679,990	-	-	146,423,816	146,423,816
2035	4,963,137	5,620,715	5,591,632	11,212,347	-	-	153,700,057	153,700,057
2036	5,211,294	5,901,751	5,869,497	11,771,248	-	-	161,338,087	161,338,087
2037	5,471,859	6,196,839	6,161,178	12,358,017	-	-	169,355,905	169,355,905
2038	5,745,452	6,506,681	6,467,362	12,974,043	-	-	177,772,405	177,772,405
2039	6,032,724	6,832,015	6,788,771	13,620,786	-	-	186,607,422	186,607,422
2040	6,334,361	7,173,616	7,126,163	14,299,779	-	-	195,881,777	195,881,777

*Note: Assumes payment in the middle of the fiscal year.*

**SECTION 2: Valuation Results for the Acton-Boxborough Regional School District and the Town of Acton  
December 31, 2010 Measurement under GASB**

**PROJECTION OF ARC – TOWN OF ACTON**

**30 Years Open (4.50% discount rate, payments increasing at 3.50%)**

<b>Fiscal Year Ended June 30</b>	<b>(1) Projected Benefit Payments</b>	<b>(2) Normal Cost</b>	<b>(3) Amortization of UAAL</b>	<b>(4) ARC</b>	<b>(5) Additional Funding (4) - (1)</b>	<b>(6) Assets at Mid-Year</b>	<b>(7) AAL at Mid-Year</b>	<b>(8) UAAL at Mid-Year (7) – (6)</b>
2011	\$1,220,984	\$1,882,253	\$2,189,351	\$4,071,604	\$0	\$0	\$60,601,773	\$60,601,773
2012	1,405,213	1,976,366	2,314,260	4,290,626	-	-	63,925,707	63,925,707
2013	1,642,751	2,075,184	2,441,194	4,516,378	-	-	67,254,256	67,254,256
2014	1,859,715	2,178,943	2,568,305	4,747,248	-	-	70,614,291	70,614,291
2015	2,032,450	2,287,890	2,696,618	4,984,508	-	-	74,058,869	74,058,869
2016	2,207,820	2,402,285	2,828,160	5,230,445	-	-	77,594,734	77,594,734
2017	2,420,807	2,522,399	2,963,187	5,485,586	-	-	81,192,661	81,192,661
2018	2,590,891	2,648,519	3,100,585	5,749,104	-	-	84,906,552	84,906,552
2019	2,725,590	2,780,945	3,242,411	6,023,356	-	-	88,785,193	88,785,193
2020	2,880,500	2,919,992	3,390,528	6,310,520	-	-	92,821,796	92,821,796
2021	3,040,104	3,065,992	3,544,678	6,610,670	-	-	97,025,830	97,025,830
2022	3,192,109	3,219,292	3,705,222	6,924,514	-	-	101,420,399	101,420,399
2023	3,351,715	3,380,257	3,873,042	7,253,299	-	-	106,014,143	106,014,143
2024	3,519,300	3,549,270	4,048,467	7,597,737	-	-	110,816,098	110,816,098
2025	3,695,265	3,726,734	4,231,844	7,958,578	-	-	115,835,708	115,835,708
2026	3,880,029	3,913,071	4,423,533	8,336,604	-	-	121,082,844	121,082,844
2027	4,074,030	4,108,725	4,623,911	8,732,636	-	-	126,567,828	126,567,828
2028	4,277,731	4,314,161	4,833,371	9,147,532	-	-	132,301,450	132,301,450
2029	4,491,618	4,529,869	5,052,327	9,582,196	-	-	138,294,988	138,294,988
2030	4,716,199	4,756,362	5,281,208	10,037,570	-	-	144,560,233	144,560,233
2031	4,952,009	4,994,180	5,520,465	10,514,645	-	-	151,109,512	151,109,512
2032	5,199,609	5,243,889	5,770,569	11,014,458	-	-	157,955,713	157,955,713
2033	5,459,590	5,506,083	6,032,012	11,538,095	-	-	165,112,305	165,112,305
2034	5,732,569	5,781,387	6,305,308	12,086,695	-	-	172,593,374	172,593,374
2035	6,019,198	6,070,456	6,590,995	12,661,451	-	-	180,413,640	180,413,640
2036	6,320,158	6,373,979	6,889,635	13,263,614	-	-	188,588,497	188,588,497
2037	6,636,165	6,692,678	7,201,816	13,894,494	-	-	197,134,035	197,134,035
2038	6,967,974	7,027,312	7,528,153	14,555,465	-	-	206,067,075	206,067,075
2039	7,316,372	7,378,678	7,869,288	15,247,966	-	-	215,405,203	215,405,203
2040	7,682,191	7,747,612	8,225,893	15,973,505	-	-	225,166,802	225,166,802

*Note: Assumes payment in the middle of the fiscal year.*



**SECTION 2: Valuation Results for the Acton-Boxborough Regional School District and the Town of Acton  
December 31, 2010 Measurement under GASB**

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October 18, 2011

**ACTUARIAL CERTIFICATION**

This is to certify that The Segal Company has conducted an actuarial valuation of certain benefit obligations of the Acton-Boxborough Regional School District and the Town of Acton other postemployment benefit programs as of December 31, 2010, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Number 43 and 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by the School District and the Town and on participant, premium and expense data provided by the School District and the Town or from vendors employed by the School District or the Town.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination or adequacy of funding an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statements Number 43 and 45 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries, and other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein.



Kathleen A. Riley, FSA, MAAA, EA  
Senior Vice President and Actuary



Howard Atkinson, Jr., ASA, MAAA, FCA  
Vice President and Health Actuary

**SECTION 3: Valuation Details for the Acton-Boxborough Regional School District and the Town of Acton December 31, 2010 Measurement under GASB**

**CHART 1**

**Required Supplementary Information – Schedule of Employer Contributions**

**Acton-Boxborough Regional School District**

<b>Fiscal Year Ended June 30,</b>	<b>Annual OPEB Cost</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2009	\$3,167,861	\$702,922	22.2%
2010	3,352,547	760,325	22.7%
2011	3,442,190	967,205	28.1%
2012	3,652,064	1,119,128	30.6%

*Note: 2012 information assumes there will be no plan changes that need to be reflected*

**Town of Acton**

<b>Fiscal Year Ended June 30,</b>	<b>Annual OPEB Cost</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2009	\$3,983,119	\$1,171,938	29.4%
2010	4,206,766	1,362,355	32.4%
2011	4,110,130	1,220,984	29.7%
2012	4,348,833	1,405,213	32.3%

*Note: 2012 information assumes there will be no plan changes that need to be reflected*

**SECTION 3: Valuation Details for the Acton-Boxborough Regional School District and the Town of Acton December 31, 2010 Measurement under GASB**

This schedule of funding progress presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

**CHART 2**

**Required Supplementary Information – Schedule of Funding Progress**

**Acton-Boxborough Regional School District**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets* (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]</b>
12/31/2007	\$0	\$35,757,233	\$35,757,233	0%	N/A	N/A
12/31/2010	\$0	43,598,441	43,598,441	0%	N/A	N/A

*Note: Enter covered payroll for fiscal 2011*

**Town of Acton**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets* (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]</b>
12/31/2007	\$0	\$48,496,069	\$48,495,069	0%	\$10,500,000	461.9%
12/31/2010	\$0	57,330,858	57,330,858	0%	N/A	N/A

*Note: Enter covered payroll for fiscal 2011*

**SECTION 3: Valuation Details for the Acton-Boxborough Regional School District and the Town of Acton December 31, 2010 Measurement under GASB**

**CHART 3**

**Required Supplementary Information – Net OPEB Obligation (NOO)**

**Acton-Boxborough Regional School District**

<b>Fiscal Year Ended June 30,</b>	<b>Annual Required Contribution (a)</b>	<b>Interest on Existing NOO (b)</b>	<b>ARC Adjustment (c)</b>	<b>Annual OPEB Cost (a) + (b) + (c) (d)</b>	<b>Actual Contribution Amount (e)</b>	<b>Net Increase in NOO (d) - (e) (f)</b>	<b>NOO as of Following Date (g)</b>
2009	\$3,167,861	\$0	\$0	\$3,167,861	\$702,922	\$2,464,939	\$2,464,939
2010	3,352,547	0	0	3,352,547	760,325	2,592,222	5,057,161
2011	3,407,741	227,572	(193,123)	3,442,190	967,205	2,474,985	7,532,146
2012	3,600,755	338,947	(287,638)	3,652,064	1,119,128	2,532,936	10,065,082

**Town of Acton**

<b>Fiscal Year Ended June 30,</b>	<b>Annual Required Contribution (a)</b>	<b>Interest on Existing NOO (b)</b>	<b>ARC Adjustment (c)</b>	<b>Annual OPEB Cost (a) + (b) + (c) (d)</b>	<b>Actual Contribution Amount (e)</b>	<b>Net Increase in NOO (d) - (e) (f)</b>	<b>NOO as of Following Date (g)</b>
2009	\$3,983,119	\$0	\$0	\$3,983,119	\$1,171,938	\$2,811,181	\$2,811,181
2010	4,206,766	0	0	4,206,766	1,362,355	2,844,411	5,655,592
2011	4,071,604	254,502	(215,976)	4,110,130	1,220,984	2,889,146	8,544,738
2012	4,290,626	384,513	(326,306)	4,348,833	1,405,213	2,943,620	11,488,358

**SECTION 3: Valuation Details for the Acton-Boxborough Regional School District and the Town of Acton December 31, 2010 Measurement under GASB**

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**CHART 4  
Required Supplementary Information**

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<b>Valuation date</b>	December 31, 2010
<b>Actuarial cost method</b>	Projected Unit Credit
<b>Amortization method</b>	Payments increasing at 3.5%
<b>Remaining amortization period</b>	30 years open
<b>Asset valuation method</b>	Market value
<b>Actuarial assumptions:</b>	
Investment rate of return	4.5%
Inflation rate	3.5%
Medical/drug cost trend rate	10.0% decreasing by 0.75% for 6 years and by 0.5% for 1 year to an ultimate level of 5.0% per year.
Part B premium	6.0%
<b>Plan membership:</b>	
<b>Acton-Boxborough Regional School District:</b>	
Current retirees, beneficiaries, and dependents	237
Current active members	<u>346</u>
Total	583
<b>Town of Acton:</b>	
Current retirees, beneficiaries, and dependents	272
Current active members	<u>382</u>
Total	654

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**SECTION 4: Supporting Information for the Acton-Boxborough Regional School District and the Town of Acton  
December 31, 2010 Measurement under GASB**

*This exhibit summarizes the participant data used for the current and prior valuations.*

*The December 31, 2010 valuation was based on census data as of January 1, 2011. The December 31, 2008 valuation was based on the census data as of January 1, 2008.*

**EXHIBIT I**

**Summary of Participant Data**

	January 1, 2008		January 1, 2011	
	Acton-Boxborough Regional School District	Town of Acton	Acton-Boxborough Regional School District	Town of Acton
<b>Active employees covered for medical benefits</b>				
Number of employees				
Male	103	139	106	137
Female	<u>246</u>	<u>256</u>	<u>240</u>	<u>245</u>
Total	349	395	346	382
Average age	46.9	45.1	47.5	46.3
Average service	10.1	10.0	10.6	11.7
<b>Retired employees, spouses and beneficiaries covered for medical benefits</b>				
Number of individuals	196	249	237	272
Average age	71.2	68.4	71.8	70.3
<b>Retired employees with life insurance coverage</b>				
Number of individuals	112	60	116	83
Average age	--	--	71.5	71.0

**SECTION 4: Supporting Information for the Acton-Boxborough Regional School District and the Town of Acton  
December 31, 2010 Measurement under GASB**

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**EXHIBIT II**

**Actuarial Assumptions and Actuarial Cost Method**

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**Data:** Detailed census data, premium rates, and summary plan descriptions for postemployment welfare benefits were provided by the Acton-Boxborough Regional School District and Town of Acton.

**Actuarial Cost Method:** Projected Unit Credit

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**Per Capita Cost Development:** Per capita costs were based on the fully-insured premium rates effective July 1, 2010. Premiums were combined by taking a weighted average based on the number of participants in each plan, and were then trended to the midpoint of the valuation year at assumed trend rates. For plans that are not community rated, actuarial factors were applied to the weighted premium to estimate individual retiree and spouse costs by age and by gender.

**Measurement Date:** December 31, 2010

**Discount Rate:** 4.50% pay-as-you-go and 8.125% funded

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**Mortality Rates:**

*Pre-Retirement* RP-2000 Employee Mortality Table projected 10 years with Scale AA (gender distinct)

*Healthy* RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA (gender distinct)

*Disabled (Non-Teachers)* RP-2000 Healthy Annuitant Mortality Table set forward 2 years

*Disabled (Teachers)* RP-2000 Healthy Annuitant Mortality Table set forward 3 years for males (previously, mortality rates for healthy non-teachers were not projected 10 years)

**SECTION 4: Supporting Information for the Acton-Boxborough Regional School District and the Town of Acton  
December 31, 2010 Measurement under GASB**

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Termination Rates before Retirement:	Groups 1 and 2 (excluding Teachers) - Rate per year (%)			
	Age	Mortality		Disability
		Male	Female	
	20	0.03	0.02	0.02
	25	0.03	0.02	0.02
	30	0.04	0.02	0.03
	35	0.07	0.04	0.06
	40	0.10	0.06	0.10
	45	0.13	0.10	0.15
	50	0.18	0.14	0.19
	55	0.25	0.23	0.24
	60	0.42	0.37	0.28

*Note: 55% of the rates shown represent accidental disability and death.*

Termination Rates before Retirement:	Group 4 – Rate per year (%)			
	Age	Mortality		Disability
		Male	Female	
	20	0.03	0.02	0.20
	25	0.03	0.02	0.20
	30	0.04	0.02	0.30
	35	0.07	0.04	0.30
	40	0.10	0.06	0.30
	45	0.13	0.10	1.00
	50	0.18	0.14	1.25
	55	0.25	0.23	1.20
	60	0.42	0.37	0.85

*Note: 90% of the rates shown represent accidental disability and death.*



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Age	Teachers - Rate per year (%)		Disability
	Mortality		
	Male	Female	
20	0.03	0.02	0.00
25	0.03	0.02	0.01
30	0.04	0.02	0.01
35	0.07	0.04	0.01
40	0.10	0.06	0.01
45	0.13	0.10	0.03
50	0.18	0.14	0.05
55	0.25	0.23	0.08
60	0.42	0.37	0.10

*Notes: 35% of the disability rates shown rates represent accidental disability.  
55% of the death rates shown represent accidental death.*

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**Withdrawal Rates:**

Years of Service	Rate per year (%)		Group 4
	Groups 1 and 2 (excluding Teachers)	Years of Service	
0	15.0	0 – 10	1.5
1	12.0	11+	0.0
2	10.0		
3	9.0		
4	8.0		
5	7.6		
6	7.5		
7	6.7		
8	6.3		
9	5.9		
10	5.4		
11	5.0		
12	4.6		
13	4.1		
14	3.7		
15	3.3		
16 – 20	2.0		
21 – 29	1.0		
30+	0.0		

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**Teachers – Withdrawal Rate (%)**

Age	0 – 4 Years of Service		5 – 9 Years of Service		10+ Years of Service	
	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

Previously:

**Teachers – Rate (%)**

Age	0 – 4 Years of Service		5 – 9 Years of Service		10+ Years of Service	
	Male	Female	Male	Female	Male	Female
20	9.0	6.0	4.0	9.0	1.0	4.0
30	10.8	11.6	4.3	9.0	1.0	4.0
40	9.3	11.4	4.9	7.0	1.5	3.1
50	5.9	6.8	4.2	4.5	1.9	1.9

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**Retirement Rates:**

Age	Rate per year (%)				
	Groups 1 and 2 (excluding Teachers)		Previously Groups 1 and 2 (excluding Teachers)		Group 4
	Male	Female	Male	Female	
45 – 49	--	--	--	--	1.0
50 – 54	--	--	1.0	1.5	2.0
55 – 59	2.0	5.5	2.0	5.5	15.0
60 – 61	12.0	5.0	12.0	5.0	20.0
62 – 64	30.0	15.0	30.0	15.0	25.0
65 – 68	40.0	15.0	40.0	15.0	100.0
69	50.0	20.0	50.0	20.0	--
70	100.0	100.0	100.0	100.0	--

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**Teachers - Rate per year (%)**

**Years of Service**

<b>Age</b>	<b>Less than 20</b>		<b>20 – 29</b>		<b>30 or more</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
50 – 53	0.0	0.0	1.0	1.5	2.0	2.0
54	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
56	8.0	2.0	5.0	3.0	20.0	15.0
57	15.0	8.0	8.0	7.0	35.0	30.0
58	15.0	10.0	10.0	7.0	50.0	35.0
59	20.0	15.0	20.0	11.0	50.0	35.0
60	15.0	20.0	20.0	16.0	50.0	35.0
61	30.0	20.0	25.0	20.0	50.0	35.0
62	20.0	25.0	30.0	30.0	40.0	35.0
63	30.0	24.0	30.0	30.0	40.0	40.0
64	40.0	20.0	30.0	30.0	50.0	30.0
65	40.0	30.0	40.0	30.0	50.0	35.0
66	40.0	30.0	30.0	30.0	50.0	35.0
67	40.0	30.0	30.0	30.0	50.0	35.0
68	40.0	30.0	30.0	30.0	50.0	30.0
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

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Previously:

Age	Teachers - Rate (%)				
	Years of Service				
	Less than 20	20 – 29		30 or more	
		Male	Female	Male	Female
50 – 53	--	1.0	1.0	1.0	1.0
54	--	2.0	1.0	3.5	3.5
55	2.0	3.0	4.0	6.0	6.0
56	4.0	3.0	4.0	18.0	18.0
57	7.0	5.0	5.0	30.0	30.0
58	8.0	7.0	7.0	40.0	40.0
59	9.0	10.0	11.0	40.0	40.0
60	12.0	20.0	16.0	35.0	35.0
61	15.0	30.0	20.0	35.0	35.0
62	18.0	35.0	25.0	40.0	40.0
63	15.0	35.0	25.0	35.0	25.0
64	25.0	30.0	30.0	30.0	30.0
65	40.0	50.0	40.0	50.0	40.0
66	40.0	30.0	30.0	30.0	30.0
67	40.0	30.0	25.0	30.0	25.0
68	40.0	30.0	35.0	30.0	35.0
69	40.0	40.0	35.0	40.0	35.0
70	100.0	100.0	100.0	100.0	100.0

**Dependents:**

Demographic data was available for spouses of current retirees. For future retirees, husbands were assumed to be three years older than their wives and 65% were assumed to have an eligible spouse who also opts for health coverage at that time.

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**Per Capita Health Costs:**

Calendar year 2011 medical and prescription drug claims costs are shown in the table below for retirees and for spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions.

Age	Non-Medicare Plans				Medicare Supplement			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
45	\$7,961	\$9,987	\$4,938	\$7,455	N/A	N/A	N/A	N/A
50	9,449	10,762	6,600	8,642	N/A	N/A	N/A	N/A
55	11,221	11,585	8,831	10,003	N/A	N/A	N/A	N/A
60	13,326	12,488	11,823	11,601	N/A	N/A	N/A	N/A
65	15,827	13,453	15,827	13,453	\$4,785	\$4,067	\$4,785	\$4,067
70	18,343	14,498	18,343	14,498	5,546	4,383	5,546	4,383
75	19,768	15,605	19,768	15,605	5,976	4,718	5,976	4,718
80	21,287	16,824	21,287	16,824	6,436	5,086	6,436	5,086

**Medicare Advantage:** \$2,966

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**Health Care Cost Trend Rates:**

Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are “net” and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that must be applied to that year’s cost to yield the next year’s projected cost.

<b>Year Ending December 31</b>	<b>Medical/Drug</b>	<b>Medicare Part B Premium</b>
2011	10.00%	6.0%
2012	9.25%	6.0%
2013	8.50%	6.0%
2014	7.75%	6.0%
2015	7.00%	6.0%
2016	6.25%	6.0%
2017	5.50%	6.0%
2018 & later	5.00%	6.0%

**Retiree Contribution Increase Rate:** Retiree contributions are expected to increase with medical trend.

**Participation and Coverage Election:** 100% of active employees with coverage are assumed to elect retiree coverage.

100% of retirees over age 65 are assumed to remain in their current medical plan for life.

For future retirees hired prior to 1986 and current retirees under age 65, 75% are assumed to be eligible for Medicare and enroll in a Medicare Supplement Plan upon reaching age 65, 10% are assumed to be eligible for and enroll in a Medicare Advantage Plan and 15% are assumed to be ineligible for Medicare and remain enrolled in a non-Medicare plan. (Previously, 85.5% are assumed to be eligible for Medicare and are assumed to enroll in a Medicare Supplement plan upon reaching age 65, 9.5% in a Medicare Advantage Plan, and 5% are assumed to be ineligible for Medicare and remain enrolled in a non-Medicare plan.)

For future retirees hired in 1986 or later, 85% are assumed to enroll in a Medicare Supplement plan upon reaching age 65 and 15% are assumed to enroll in a Medicare



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Advantage plan. (Previously, 90% in Medicare Supplement and 10% in Medicare Advantage plan.)

100% of current and future retirees with medical coverage are assumed to have life insurance coverage.

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<b>Plan Design:</b>	Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.
<b>Administrative Expenses:</b>	Administrative expenses for self-insured plans were based on current vendor contractual rates and fees. Administrative expenses for insured plans were assumed to be included in the fully insured premium rates.
<b>Annual Maximum Benefits:</b>	No increase in the annual maximum benefit levels was assumed.
<b>Lifetime Maximum Benefits:</b>	No information was available regarding accumulations toward lifetime maximum benefits and no such accumulations were assumed.
<b>Missing Participant Data:</b>	A missing census item for a given participant was assumed to equal the average value of that item over all other participants of the same status for whom the item is known.
<b>Health Care Reform Assumption:</b>	The Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 creates a temporary reinsurance program for eligible health care coverage for pre-Medicare retirees over age 55. The program will reimburse the plan sponsor for 80% of the retiree claims between \$15,000 and \$90,000. Due to the short nature of this program, the limited financing, and uncertainty of qualifying and receiving payment (the program will be on a first come first served basis until financing runs out), we have not reflected the value of this program in the valuation. Additional provisions of these Acts that may affect retiree health benefits in the future have not been reflected.

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**EXHIBIT III**

**Summary of Plan**

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This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

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**Eligibility:** Retired and receiving a pension from the Middlesex County Retirement System or the Massachusetts Teachers Retirement System.

**Group 1 (including Teachers):**

- Retirees with at least 10 years of creditable service are eligible at age 55;
- Retirees with at least 20 years of creditable service are eligible at any age.

**Group 4:**

- Retirees with at least 10 years of creditable service are eligible at age 45;
- Retirees with at least 20 years of creditable service are eligible at any age.

**Disability:** Accidental (job-related) Disability has no age or service requirement. Ordinary (non-job related) Disability has no age requirement but requires 10 years of creditable service.

**Pre-Retirement Death:** Surviving spouses of members who die in active service on Accidental (job-related) Death are eligible at any age. Surviving spouses of members who die in active service on Ordinary (non-job related) Death are eligible after two years of service.

**Post-Retirement Death:** Surviving spouse is eligible.

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**Benefit Types:** Medical and prescription drug benefits are provided to all eligible retirees through a variety of plans offered by Blue Cross Blue Shield of Massachusetts. The Acton-Boxborough Regional School District and the Town of Acton also pays 50% of the retiree life insurance premium. (Dental coverage is offered but it is 100% retiree paid and therefore has no impact on this valuation.)

**Duration of Coverage:** Lifetime.

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<b>Dependent Benefits:</b>	Medical and prescription drugs.
<b>Dependent Coverage:</b>	Benefits are payable to a spouse for their lifetime, regardless of when the retiree dies.
<b>MGL Chapter 32B, Section 18:</b>	Adopted.
<b>Retiree Life:</b>	\$5,000

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**Retiree Contributions:**

Premium rates and retiree contributions as of July 1, 2011 are summarized below:

	Subscribers			<i>Retirees 65 and</i>	Monthly Premium (eff. 7/1/2011)	Town cost	Retiree cost
	Active	Retiree	Total				
<b><u>Non-Medicare Plans</u></b>							
BCBS Blue Care Elect PPO							
Individual	16	12	28	2	\$1,212.12	\$606.06	\$606.06
Family	34	9	43	0	\$2,738.32	\$1,369.16	\$1,369.16
BCBS Master Health Plus							
Individual	8	8	16	5	\$1,049.36	\$524.68	\$524.68
Family	20	4	24	2	\$2,399.80	\$1,199.90	\$1,199.90
BCBS Network Blue HMO							
Individual	113	32	145	7	\$625.04	\$312.52	\$312.52
Family	219	21	240	4	\$1,449.76	\$724.88	\$724.88
HP HealthCare							
Individual	78	11	89	0	\$634.92	\$317.46	\$317.46
Family	240	11	251	1	\$1,479.92	\$739.96	\$739.96
<b><u>Non-Medicare Total</u></b>	728	108	836	21			
<b><u>Medicare Supplement Plans</u></b>							
Medex	N/A	182	182		\$425.39	\$212.70	\$212.69
<b><u>Medicare Total</u></b>		182	182				
<b><u>Medicare Advantage Plans</u></b>							
HP First Seniority Freedom	N/A	6	6		\$504.18	\$276.00	\$228.18
Tufts Preferred	N/A	33	33		\$454.35	\$242.00	\$212.35
<b><u>Medicare Advantage Total</u></b>		39	39				
<b><u>Retiree Total**</u></b>		329					

\* 21 of 242 over-65 retirees are in a non-Medicare plan

\*\* In addition, there are 180 spouses of retirees covered under an individual or family policy.