Segal Consulting

Belmont Contributory Retirement System

Actuarial Valuation and Review as of January 1, 2014

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

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Purpose

This report has been prepared by Segal Consulting to present a valuation of the Belmont Contributory Retirement System as of January 1, 2014. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of M.G.L. Chapter 32;
- The characteristics of covered active participants, inactive participants, and retired participants and beneficiaries as of January 1, 2014;
- The assets of the Plan as of December 31, 2013;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

1. The actuarial valuation report as of January 1, 2014 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected.
2. The actuarial value of assets as of December 31, 2013 was $77.2 million, or 93.8% of the market value of assets of $82.3 million (as reported in the Annual Statement). As of December 31, 2011, the actuarial value of assets was 103.6% of market value. During the plan years ended December 31, 2012 and December 31, 2013, the market value rates of return were 11.91% and 15.81%, respectively. Because the actuarial value of assets gradually recognizes market value fluctuations, the actuarial rates of return for the plan years ended December 31, 2012 and December 31, 2013 were 4.49% and 12.35%, respectively.
3. The total unrecognized investment gain as of December 31, 2013 was $5,092,663. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience. This implies that earning the assumed rate of investment return (net of expenses) on a market value basis will result in investment gains on the actuarial value of assets in the next few years. The unrecognized investment gains are not reflected in the attached funding schedules.

7. Because the fiscal 2015 appropriation has already been budgeted at $7,364,523, the results of this valuation will first be reflected in the fiscal 2016 appropriation. The funding schedule in Chart 14 fully funds the System by June 30, 2027 with appropriation payments increasing 6.97% per year. This will result in a total fiscal 2016 appropriation of $7,877,958 and a total fiscal 2017 appropriation of $8,427,189. These amounts reflect payment of the appropriation in two equal amounts on July 1 and December 31. If the appropriation is made in one payment on July 1, the amount will be lower.

8. On a market value basis, the funded ratio has increased from 48.17% as of January 1, 2012 to 54.54% as of January 1, 2014. On an actuarial basis, the funded ratio has increased from 49.91% as of January 1, 2012 to 51.16% as of January 1, 2014.

9. Section 4 includes the disclosure information required by Governmental Accounting Standards Board (GASB) Statements No. 25 and 27. Section 5 shows the format of the disclosure information required by GASB Statements No. 67 and 68. The exhibits in Section 5 will be completed at the end of the year when December 31, 2014 financial information is available. At that time, the liabilities will be projected to the end of the year and the allocations to each employer will be determined.

A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active participants, inactive participants, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A and B.

A historical perspective of how the participant population has changed over the past three valuations can be seen in this chart.

CHART 1

Participant Population: 2009 – 2013

Year Ended December 31	Active Participants	Inactive Participants	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
2009	425	142	343	1.14
2011	432	141	341	1.12
2013	458	164	346	1.11

Retired Participants and Beneficiaries
As of December 31, 2013, 299 retired participants and 47 beneficiaries were receiving total monthly benefits of $779,173, excluding COLAs reimbursed by the Commonwealth. For comparison, in the previous valuation, there were 294 retired participants and 47 beneficiaries receiving monthly benefits of $758,762, excluding COLAs reimbursed by the Commonwealth.

These graphs show a distribution of the current retired participants and beneficiaries based on their monthly amount and age, by type of pension.

Beneficiary
Accidental Disability
Ordinary Disability
Superannuation

CHART 4

Distribution of Retired Participants and Beneficiaries by Type and by Monthly Amount as of December 31, 2013

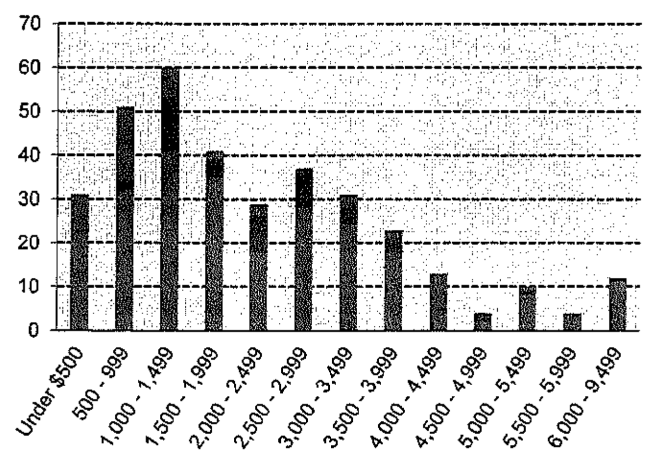
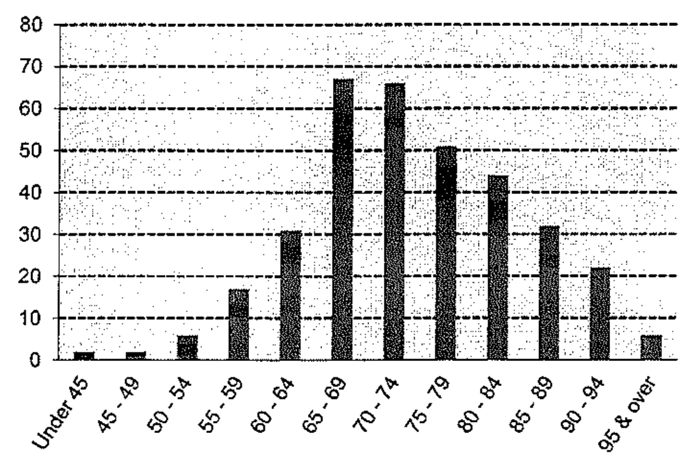


CHART 5

Distribution of Retired Participants and Beneficiaries by Type and by Age as of December 31, 2013



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 7

Determination of Actuarial Value of Assets

		Year Ended			
		December 31, 2013		December 31, 2012	
1. Market value of assets at the end of the year			$82,305,953		$71,659,922
2. Calculation of unrecognized return*	Original Amount	Unrecognized Return		Unrecognized Return	
(a) Year ended December 31, 2013	$5,751,229	$4,600,983		N/A	
(b) Year ended December 31, 2012	2,679,853	1,607,912		$2,143,882	
(c) Year ended December 31, 2011	-4,123,559	-1,649,424		-2,474,136	
(d) Year ended December 31, 2010	2,665,959	533,192		1,066,384	
(e) Year ended December 31, 2009	7,994,349	N/A		1,598,870	
(f) Total unrecognized return			5,092,663		2,335,000
3. Preliminary actuarial value: (1) - (2f)			77,213,290		69,324,922
4. Adjustment to be within 20% corridor			0		0
5. Final actuarial value of assets at the end of the year: (3) + (4)			$77,213,290		$69,324,922
6. Actuarial value as a percentage of market value: (5) ÷ (1)			93.8%		96.7%
7. Amount deferred for future recognition: (1) - (5)			5,092,663		$2,335,000

**Unrecognized return is the difference between the total return and the expected return on a market value basis and is recognized over a five-year period.*

C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total loss for the two-year period ending December 31, 2013 is $5,471,521 as shown in Chart 9. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience over the past two years.

CHART 9

Actuarial Experience for Two-Year Period Ended December 31, 2013

1. Net gain from investments*	$829,238
2. Net loss from net 3(8)(c) reimbursements out of System and administrative expenses	-468,428
3. Net loss from other experience	-5,832,331
4. Net experience loss: (1) + (2) + (3)	-$5,471,521

* *Details in Chart 10*

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last two years.

We have maintained the assumed rate of return of 7.75%.

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

CHART 11

Investment Return – Actuarial Value vs. Market Value: 2012 - 2013

	Actuarial Value Investment Return		Market Value Investment Return	
Year Ended December 31	Amount	Percent	Amount	Percent
2012	$2,995,512	4.49%	$7,670,611	11.91%
2013	8,522,632	12.35	11,280,295	15.81
Total	$11,518,144		$18,950,906	

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

The net loss from this other experience for the two-year period ending December 31, 2013 amounted to $5,832,331 which is 3.9% of the actuarial accrued liability. This loss is primarily due to data changes and other miscellaneous experience, including salaries increasing more than expected.

This valuation reflects the following changes in actuarial assumptions:

- The mortality assumption for disabled participants was changed from the RP-2000 Healthy Annuitant Mortality Table set forward two years to the RP-2000 Healthy Annuitant Mortality Table set forward three years projected 19 years with Scale AA.
- The liability for vested members in inactive status was changed from the employee's annuity savings fund to the greater of the employee's annuity savings fund or the present value of a deferred annuity.
- The percentage of accidental disability retirees that are assumed to die from the same cause of the disability was changed from 0% for all participants to 20% for Groups 1 and 2 and 60% for Group 4.
- The percentage of disabilities assumed to be accidental was changed from 60% to 90% for Groups 1 and 2.
- The percentage of deaths assumed to be accidental was changed from 20% for all participants to 55% for Groups 1 and 2 and 90% for Group 4.
- The administrative expense assumption was increased from $100,000 for 2012, increasing 3% annually, to $175,000 for 2014, increasing 4% annually.
- The assumed net 3(8)(c) disbursements were increased from $75,000 to $200,000, increasing 4% annually.

The changes in assumptions and methods increased the unfunded liability by $2,204,450 and the normal cost by $404,962.

The following plan change is included in this valuation:

- Members hired on or after April 2, 2012 are covered by the provisions of Chapter 32 as amended by Chapter 176 of the Acts of 2011 and Chapter 139 of the Acts of 2012.

D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability.

The recommended contribution for fiscal 2015 is set to the previously budgeted amount of $7,364,523. The results of this valuation will first be reflected in the fiscal 2016 appropriation. The funding schedule in Chart 14 fully funds the System by fiscal 2027, the same as the prior funding schedule. The appropriation is calculated to increase 6.97% per year through fiscal 2027. This will result in a total fiscal 2016 appropriation of $7,877,958 and a total fiscal 2017 appropriation of $8,427,189. These amounts reflect payment of the appropriation in two equal amounts on July 1 and December 31. If the appropriation is made in one payment on July 1, the amount will be lower.

CHART 13
Recommended Contribution

	Year Beginning January 1			
	2014		2012	
	Amount	% of Payroll	Amount	% of Payroll
1. Total normal cost	$3,290,948	13.09%	$3,019,106	14.50%
2. Administrative expenses and allowance for net 3(8)(c) payments	375,000	1.49%	175,000	0.84%
3. Expected employee contributions	-2,417,389	-9.61%	-1,805,339	-8.67%
4. Employer normal cost: (1) + (2) + (3)	$1,248,559	4.97%	$1,388,677	6.67%
5. Actuarial accrued liability	150,911,920		134,522,071	
6. Actuarial value of assets	77,213,290		67,144,549	
7. Unfunded actuarial accrued liability: (5) - (6)	$73,698,630		$67,377,522	
8. Employer normal cost projected to July 1, 2014 and 2012, respectively, adjusted for timing	1,297,269	5.06%	1,253,480	5.90%
9. Projected unfunded actuarial accrued liability	76,501,166		69,939,686	
10. Payment on projected unfunded actuarial accrued liability, adjusted for timing	6,067,254	23.66%	5,212,718	24.55%
11. Total recommended contribution: (8) + (10)	$7,364,523	28.72%	$6,466,198	30.45%
12. Projected payroll	$25,640,813		$21,235,633	

Notes: Recommended contributions are assumed to be paid in two equal installments on July 1 and December 31.
Projected employer normal cost as of July 1, 2012 is based on 2010 valuation.

EXHIBIT A

Table of Plan Coverage

Category	Year Ended December 31		Change From Prior Year
	2013	2011	
Number	458	432	6.0%
Average age	46.1	46.7	N/A
Average years of service	11.6	10.3	N/A
Total payroll	$24,186,238	$20,823,251	16.2%
Average payroll	52,808	48,202	9.6%
Member contributions	22,005,538	19,282,753	14.1%
Inactive participants entitled to a return of their employee contributions	155	141	N/A
Inactive participants with a vested right to a deferred or immediate benefit	9	- -*	N/A
Retired participants:			
Number in pay status	254	249	2.0%
Average age	74.7	N/A	N/A
Average monthly benefit	$2,400	$2,336	2.7%
Disabled participants:			
Number in pay status	45	45	0.0%
Average age	68.3	N/A	N/A
Average monthly benefit	$2,428	$2,421	0.3%
Beneficiaries in pay status:			
Number in pay status	47	47	0.0%
Average age	74.2	N/A	N/A
Average monthly benefit	$1,283	$1,449	-11.5%

** Included with inactive participants entitled to a return of their employee contributions.*

Note: Year end 2011 results are based on the January 1, 2012 valuation report prepared by Buck Consultants, LLC.

EXHIBIT C

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended December 31, 2013		Year Ended December 31, 2012	
Net assets at actuarial value at the beginning of the year		$69,324,922		$67,144,549
Contribution income:				
Employer contributions	$6,899,432		$6,466,198	
Employee contributions	2,173,952		2,205,781	
Less administrative expenses	-179,468		-177,678	
Net contribution income		8,893,916		8,494,301
Net investment income		8,522,632		2,995,512
Total income available for benefits		$17,416,548		$11,489,813
Less benefit payments:				
Pensions	-$9,232,548		-$8,976,309	
Net 3(8)(c) reimbursements	-235,296		-217,040	
Refunds, annuities, & Option B refunds	-60,336		-131,024	
Workers Compensation Settlements	0		14,933	
Net benefit payments		-$9,528,180		-$9,309,440
Change in reserve for future benefits		$7,888,368		$2,180,373
Net assets at actuarial value at the end of the year		$77,213,290		$69,324,922

EXHIBIT E

Table of Amortization Bases as of July 1, 2014

Type	Annual Payment	Years Remaining	Outstanding Balance as of July 1, 2014
2002 ERI	$23,098	4.00	$81,361
2003 ERI	70,989	11.00	660,711
Remaining unfunded liability	5,973,167	13.00	75,759,094
Total	$6,067,254		$76,501,166

Notes: Recommended contributions are assumed to be paid in two equal installments on July 1 and December 31.
The 2002 ERI liability is amortized in level payments.
The 2003 ERI payments increase 4.50% per year.
Payment on remaining unfunded liability reflects adjustment to set fiscal 2015 appropriation to budgeted amount.

EXHIBIT G

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or actuarial assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Withdrawal rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial accrued liability for actives: The value of all projected benefit payments for current members less the portion that will be paid by future normal costs.

Actuarial accrued liability for pensioners: The single-sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded actuarial accrued liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There are many approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

EXHIBIT I

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:		
1. Retired participants as of the valuation date (including 47 beneficiaries in pay status)		346
2. Participants active during the year ended December 31, 2013 with total accumulated contributions of $22,005,538 and projected 2014 payroll of $25,142,886		458
3. Inactive participants with a right to a return of their contributions		155
4. Inactive participants with a vested right to a deferred or immediate benefit as of December 31, 2013		9

The actuarial factors as of January 1, 2014 are as follows:		
1. Total normal cost		$3,290,948
2. Administrative expenses and allowance for net 3(8)(c) reimbursements		375,000
3. Expected employee contributions		-2,417,389
4. Employer normal cost: (1) + (2) + (3)		$1,248,559
5. Actuarial accrued liability		150,911,920
Retired participants and beneficiaries	$84,186,110	
Active participants	65,169,037	
Inactive participants	1,556,773	
6. Actuarial value of assets ($82,305,953 at market value as reported in the Annual Statement)		77,213,290
7. Unfunded actuarial accrued liability: (5) – (6)		73,698,630

The actuarial factors projected to July 1, 2014 are as follows:	
1. Employer normal cost projected to July 1, 2014, adjusted for timing	$1,297,269
2. Projected unfunded actuarial accrued liability	76,501,166
3. Payment on projected unfunded actuarial accrued liability, adjusted for timing	6,067,254
4. Recommended contribution: (1) + (3)	$7,364,523
5. Projected payroll	$25,640,813

Note: Recommended contributions are assumed to be paid in two equal installments on July 1 and December 31.

EXHIBIT III

Supplemental Information Required by GASB - Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
01/01/2002	$52,838,407	$87,176,074	$34,337,667	60.61%	--*	--*
01/01/2004	53,364,538	94,947,822	41,583,284	56.20%	--*	--*
01/01/2006	53,736,253	101,659,952	47,923,699	52.86%	--*	--*
01/01/2008	61,969,418	112,124,213	50,154,795	55.27%	--*	--*
01/01/2010	63,499,612	123,684,550	60,184,938	51.34%	$19,351,253	311.01%
01/01/2012	67,144,549	134,522,071	67,377,522	49.91%	20,823,251	323.57%
01/01/2014	77,213,290	150,911,920	73,698,630	51.16%	25,142,886	293.12%

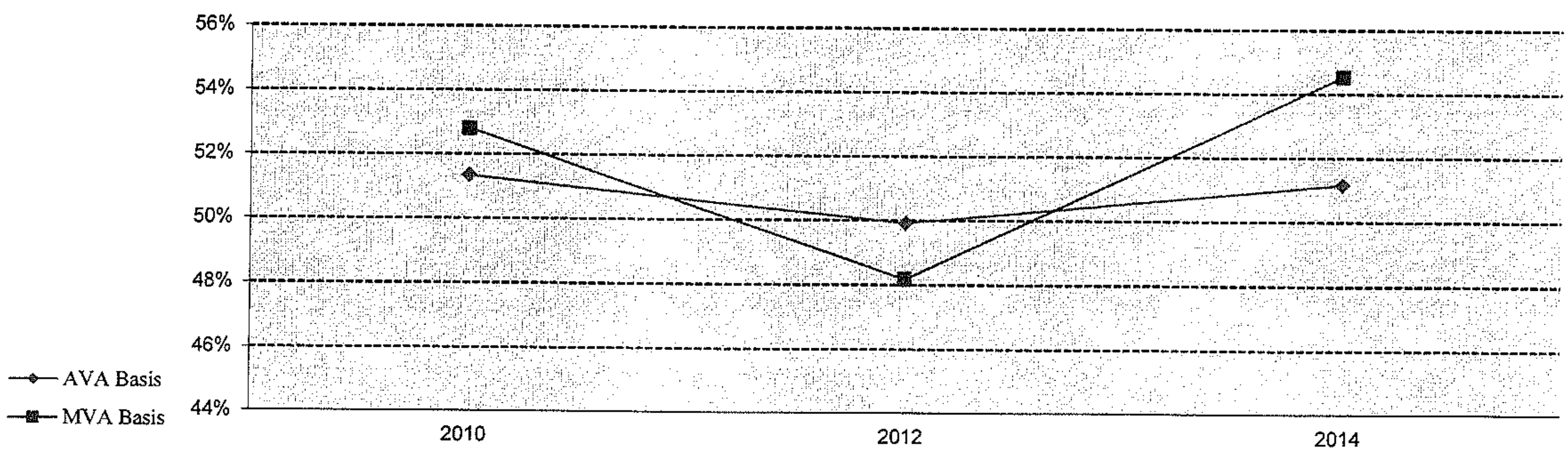
* *Information not available.*

EXHIBIT V

Funded Ratio

A critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

The chart below depicts a history of the funded ratios for this plan. On a market value basis, the funded ratio has increased from 48.17% as of January 1, 2012 to 54.54% as of January 1, 2014. On an actuarial basis, the funded ratio has increased from 49.91% as of January 1, 2012 to 51.16% as of January 1, 2014.



Termination Rates before Retirement (continued):

	Group 4 – Rate (%)		
	Mortality		Disability
Age	Male	Female	
20	0.02	0.01	0.10
25	0.03	0.01	0.20
30	0.04	0.02	0.30
35	0.07	0.04	0.30
40	0.09	0.05	0.30
45	0.11	0.07	1.00
50	0.13	0.11	1.25
55	0.18	0.20	1.20
60	0.32	0.34	0.85

Notes: 90% of the disability rates shown represent accidental disability.
60% of the accidental disabilities will die from the same cause as the disability. (Previously, 0%)
90% of the death rates shown represent accidental death. (Previously, 20%)

Retirement Rates:

	Rate per year (%)		
Age	Groups 1 and 2		Group 4
	Male	Female	
45 – 49	0.0	0.0	1.0
50 – 51	1.0	1.5	2.0
52	1.0	2.0	2.0
53	1.0	2.5	5.0
54	2.0	2.5	7.5
55	2.0	5.5	15.0
56 – 57	2.5	6.5	10.0
58	5.0	6.5	10.0
59	6.5	6.5	15.0
60	12.0	5.0	20.0
61	20.0	13.0	20.0
62	30.0	15.0	25.0
63	25.0	12.5	25.0
64	22.0	18.0	30.0
65	40.0	15.0	100.0
66 – 67	25.0	20.0	- -
68	30.0	25.0	- -
69	30.0	20.0	- -
70	100.0	100.0	- -

Retirement Age for Inactive Vested Participants: Age 60 for Group 1 and Group 2 members and age 55 for Group 4 members hired prior to April 2, 2012. For members hired April 2, 2012 or later, age 60 for Group 1 members, age 55 for Group 2 members and age 50 for Group 4 members. (Previously, all inactive participants were assumed to take a refund of their annuity savings fund at termination.)

Unknown Data for Participants: Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

Actuarial Value of Assets:

Market value of assets as reported in the System's Annual Statement less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual market value return and the expected market value return and is recognized at 20% per year over a five-year period, further adjusted, if necessary, to be within 20% of the market value.

Actuarial Cost Method:

Entry Age Normal Actuarial Cost Method. Entry Age is the age of the participant less total creditable service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary. Normal Cost is determined by using the plan of benefits applicable to each participant.

Changes in Assumptions:

This valuation reflects the following:

- The mortality assumption for disabled participants was changed from the RP-2000 Healthy Annuitant Mortality Table set forward two years to the RP-2000 Healthy Annuity Mortality Table set forward three years projected 19 years with Scale AA.
- The liability for vested members in inactive status was changed from the employee's annuity savings fund to the greater of the employee's annuity savings fund or the present value of a deferred annuity.
- The percentage of accidental disability retirees that are assumed to die from the same cause of the disability was changed from 0% for all participants to 20% for Groups 1 and 2 and 60% for Group 4.
- The percentage of disabilities assumed to be accidental was changed from 60% to 90% for Groups 1 and 2.
- The percentage of deaths assumed to be accidental was changed from 20% for all participants to 55% for Groups 1 and 2 and 90% for Group 4.
- The administrative expense assumption was increased from $100,000 for 2012, increasing 3% annually, to $175,000 for 2014, increasing 4% annually.
- The assumed net 3(8)(c) disbursements were increased from $75,000 to $200,000, increasing 4% annually.

A member's final three-year average salary is defined as the greater of the highest consecutive three-year average annual rate of regular compensation and the average annual rate of regular compensation received during the last three years of creditable service prior to retirement.

For employees hired on April 2, 2012 or later, the annual amount of the retirement allowance is based on the member's final five-year average salary multiplied by the number of years and full months of creditable service at the time of retirement and multiplied by a percentage according to the following tables based on the age and years of creditable service of the member at retirement:

For members with less than 30 years of creditable service:

	Age Last Birthday at Date of Retirement		
Percent	**Group 1**	**Group 2**	**Group 4**
2.50	67 or over	62 or over	57 or over
2.35	66	61	56
2.20	65	60	55
2.05	64	59	54
1.90	63	58	53
1.75	62	57	52
1.60	61	56	51
1.45	60	55	50

For members with 30 years of creditable service or greater:

	Age Last Birthday at Date of Retirement		
Percent	**Group 1**	**Group 2**	**Group 4**
2.500	67 or over	62 or over	57 or over
2.375	66	61	56
2.250	65	60	55
2.125	64	59	54
2.000	63	58	53
1.875	62	57	52
1.750	61	56	51
1.625	60	55	50

Members hired prior to April 2, 2012 who terminate before age 55 with ten or more years of creditable service are eligible for a retirement allowance upon the attainment of age 55 (provided they have not withdrawn their accumulated deductions from the Annuity Savings Fund of the System).

Members of Group 1 hired April 2, 2012 or later may retire upon the attainment of age 60. Members of Group 2 or 4 hired April 2, 2012 or later may retire upon the attainment of age 55. Members of Group 4 may retire upon attainment of age 50 with ten years of creditable service.

Members hired April 2, 2012 or later who terminate before age 55 (60 for members of Group 1) with ten or more years of creditable service are eligible for a retirement allowance upon the attainment of age 55 (60 for members of Group 1) provided they have not withdrawn their accumulated deductions from the Annuity Savings Fund of the System.

Ordinary Disability Benefits

A member who is unable to perform his or her job due to a non-occupational disability will receive a retirement allowance if he or she has ten or more years of creditable service and has not reached age 55. The annual amount of such allowance shall be determined as if the member retired for superannuation at age 55 (age 60 for Group 1 members hired on or after April 2, 2012), based on the amount of creditable service at the date of disability. For veterans, there is a minimum benefit of 50 percent of the member's most recent year's pay plus an annuity based on his or her own contributions.

Accidental Disability Benefit

For a job-connected disability, the benefit is 72 percent of the member's most recent annual pay plus an annuity based on his or her own contributions, plus additional amounts for surviving children. Benefits are capped at 75 percent of annual rate of regular compensation for employees who become members after January 1, 1988.

Options

Members may elect to receive a full retirement allowance payable for life under Option A. Under Option B a member may elect to receive a lower monthly allowance in exchange for a guarantee that at the time of death any contributions not expended for annuity payments will be refunded to the beneficiary. Option C allows the member to take a lesser retirement allowance in exchange for providing a survivor with two-thirds of the lesser amount. Option C pensioners will have benefits converted from a reduced to a full retirement if the beneficiary predeceases the retiree.

Post-Retirement Benefits

The Board has adopted the provisions of Section 51 of Chapter 127 of the Acts of 1999, which provide that the Retirement Board may approve an annual COLA in excess of the Consumer Price Index but not to exceed a 3% COLA on the first $12,000 of a retirement allowance. Cost-of-living increases granted prior to July 1, 1998 are reimbursed by the Commonwealth and not reflected in this report.

Changes in Plan Provisions

Members hired on or after April 2, 2012 are covered by the provisions of Chapter 32 as amended by of Chapter 176 of the Acts of 2011 and Chapter 139 of the Acts of 2012.

Asset Class	Long-Term Expected Real Rate of Return
Domestic equity	6.60%
International developed markets equity	7.10%
Core fixed income	2.20%
High-yield fixed income	4.70%
Real estate	4.40%
Hedge fund, GTAA, Risk parity	3.90%
Cash	1.80%

Discount rate: The discount rate used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that Belmont Contributory Retirement System contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the Belmont Contributory Retirement System, calculated using the discount rate of 7.75%, as well as what the Belmont Contributory Retirement System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.75%) or 1-percentage-point higher (8.75%) than the current rate:

	1% Decrease (6.75%)	Current Discount (7.75%)	1% Increase (8.75%)
Belmont Contributory Retirement System's net pension liability as of December 31, 2013	$84,210,828	$68,605,967	$55,253,849

EXHIBIT 3

Schedule of Changes in the Net Pension Liability – Last Ten Years

	Year End December 31,									
	2014	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**	**2006**	**2005**
Total pension liability										
Service cost	$3,290,948									
Interest	--									
Differences between expected and actual experience	--									
Changes of assumptions	--									
Changes of benefit terms	--		(Historical information prior to implementation of GASB 67/68 is not required)							
Benefit payments, including refunds of employee contributions	--									
Net change in total pension liability	TBD									
Total pension liability - beginning	150,911,920									
Total pension liability - ending (a)	TBD									
Plan fiduciary net position										
Contributions - employer	--									
Contributions - employee	--									
Net investment income	--									
Benefit payments, including refunds of employee contributions	--		(Historical information prior to implementation of GASB 67/68 is not required)							
Other	--									
Net change in fiduciary net position	TBD									
Plan fiduciary net position - beginning	82,305,953									
Plan fiduciary net position - ending (b)	TBD									
Net pension liability – ending: (a)-(b)	TDB									
Plan's fiduciary net position as a percentage of the total pension liability	TBD		(Historical information prior to implementation of GASB 67/68 is not required)							
Covered-employee payroll	$25,142,886									
Net pension liability as a percentage of covered-employee payroll	TBD									

**Covered-employee payroll as reported in the January 1, 2014 funding valuation report*

EXHIBIT 5

Notes to Required Supplementary Information

Valuation date	Actuarial determined contribution rates are calculated as of January 1 two years prior to the end of the employer's fiscal year in which contributions are reported.
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level payments on the 2002 ERI liability, payments increasing 4.5% per year for the 2003 ERI liability, and remaining liability amortized so that total payment increases 6.97% annually.
Remaining amortization period	4 years from July 1, 2014 for the 2002 ERI liability, 11 years from July 1, 2014 for the 2003 ERI liability and 13 years from July 1, 2014 for the remaining unfunded liability.
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and expected return on a market value basis, and is recognized over a five-year period at 20% per year, further adjusted, if necessary, to be within 20% of the market value.
Actuarial assumptions:	
Investment rate of return	7.75%
Discount rate	7.75%
Inflation rate	4.00%
Projected salary increases	Varies by length of service with ultimate rates of 3.75% for Groups 1 and 2 and 4.25% for Group 4
Cost of living adjustments	3.00% of first $12,000 of retirement income
Plan membership:	
Retired participants and beneficiaries receiving benefits	346
Inactive participants entitled to a return of their employee contributions	155
Inactive participants with a vested right to a deferred or immediate benefit	9
Active participants	458
Total	968