

City of Salem Contributory Retirement System

*Actuarial Valuation and Review
as of January 1, 2010*

Copyright © 2010

**THE SEGAL GROUP, INC.,
THE PARENT OF THE SEGAL COMPANY
ALL RIGHTS RESERVED**



The Segal Company
116 Huntington Ave., 8th Floor Boston, MA 02116
T 617.424.7300 F 617.424.7390 www.segalco.com

October 21, 2010

*Board of Trustees
City of Salem Contributory Retirement System
20 Central Street, Suite 110
Salem, MA 01970*

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of January 1, 2010. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2011 and later years and analyzes the preceding two years' experience.

The census information and financial information on which our calculations were based was prepared by the staff of the Salem Retirement System. That assistance is gratefully acknowledged. The actuarial calculations were completed under my supervision.

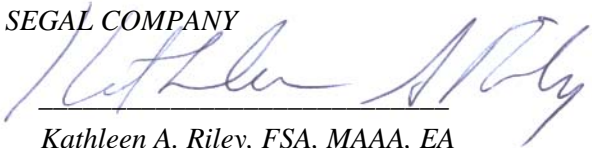
This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

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

Sincerely,

THE SEGAL COMPANY

By:


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

7345087v2/03884.005

SECTION 1

VALUATION SUMMARY

Purpose	i
Significant Issues in Valuation Year.....	i
Summary of Key Valuation Results.....	iii

SECTION 2

VALUATION RESULTS

A. Participant Data.....	1
B. Financial Information.....	4
C. Actuarial Experience.....	7
D. Recommended Contribution	12
E. Information Required by the GASB.....	14

SECTION 3

SUPPLEMENTAL INFORMATION

EXHIBIT A Table of Plan Coverage.....	15
EXHIBIT B Participants in Active Service as of December 31, 2009	16
EXHIBIT C Summary Statement of Income and Expenses on an Actuarial Value Basis.....	17
EXHIBIT D Development of the Fund Through December 31, 2009	18
EXHIBIT E Development of Unfunded Actuarial Accrued Liability	19
EXHIBIT F Table of Amortization Bases as of July 1, 2010	20
EXHIBIT G Funding Schedule.....	21
EXHIBIT H Department Statistics as of January 1, 2010.....	22
EXHIBIT I Department Results	23
EXHIBIT J Definitions of Pension Terms.....	24

SECTION 4

REPORTING INFORMATION

EXHIBIT I Summary of Actuarial Valuation Results	26
EXHIBIT II Supplementary Information Required by the GASB – Schedule of Employer Contributions.....	27
EXHIBIT III Supplementary Information Required by the GASB – Schedule of Funding Progress....	28
EXHIBIT IV Supplementary Information Required by the GASB.....	29
EXHIBIT V Actuarial Assumptions and Actuarial Cost Method	30
EXHIBIT VI Summary of Plan Provisions	34

SECTION 1: Valuation Summary for the City of Salem Contributory Retirement System

Purpose

This report has been prepared by The Segal Company to present a valuation of the City of Salem Contributory Retirement System as of January 1, 2010. 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, 2010;
- The assets of the Plan as of December 31, 2009;
- 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:

- The actuarial valuation report as of January 1, 2010 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected.
- During the plan years ended 2008 and 2009, the market value rates of return were -28.81% and 14.86%, respectively. Because the actuarial value of assets gradually recognizes market value fluctuations over a five-year period, the actuarial rates of return for the plan years ended 2008 and 2009 were -13.95% and 14.97%, respectively. The actuarial value of assets as of December 31, 2009 was \$100.0 million, or 120.0% of the market value of assets of \$83.4 million. As of December 31, 2007, the actuarial value of assets was 100.9% of market value.
- As indicated in Section 2, Subsection B of this report, the total unrecognized investment loss as of December 31, 2009 is \$16,674,455. This investment loss 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 gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. The funding schedule shown in Section 3, Exhibit G reflects the deferred investment losses in accordance with the asset valuation method adopted by the Board.

SECTION 1: Valuation Summary for the City of Salem Contributory Retirement System

- As of January 1, 2008 the System had an unfunded liability of \$79.4 million. The unfunded liability has increased to \$93.4 million as of January 1, 2010 due to net investment losses over the two-year period, partially offset by salary increases less than projected. The unfunded liability will continue to increase for the next few years as the deferred investment losses are recognized.
- The following actuarial assumptions were changed with this valuation:
 - The administrative expense assumption was lowered from \$370,000 for calendar 2008 to \$350,000 for calendar 2010.
 - The salary scale was lowered from 5.5% to 5.0%.
 - The pre-retirement mortality table was changed from the RP-2000 Employee Mortality Table to the RP-2000 Employee Mortality Table projected 10 years with Scale AA.
 - The healthy retiree mortality table was changed from the RP-2000 Healthy Annuitant Mortality Table to the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA.
 - The disabled retiree mortality table was changed from the RP-2000 Healthy Annuitant Mortality Table set forward 2 years to the RP-2000 Health Annuitant Mortality Table set forward 3 years for males only.
- The recommended contribution for fiscal 2011 is equal to the City's previously budgeted amount of \$9,991,587. This amount was based on a funding schedule that fully amortized the unfunded liability by June 30, 2025 with amortization payments that increased 3.5% per year. The Board has adopted a funding schedule which will fully amortize the existing unfunded liability plus the expected increases in the unfunded liability due to the deferred investment losses by June 30, 2030 with amortization payments that increase 4.5% per year. The fiscal 2012 appropriation is \$10,470,232.

SECTION 1: Valuation Summary for the City of Salem Contributory Retirement System

Summary of Key Valuation Results

	2010	2008
Contributions for fiscal year beginning July 1:		
Recommended for fiscal 2011 and 2009	\$9,991,587	\$9,265,481
Recommended for fiscal 2012 and 2010	10,470,232	9,628,753
Recommended for fiscal 2013 and 2011	10,941,379	9,991,587
Funding elements for plan year beginning January 1:		
Normal cost, including administrative expenses	\$5,162,549	\$5,451,493
Market value of assets	83,372,276	99,068,990
Actuarial value of assets	100,046,731	99,998,471
Actuarial accrued liability	193,470,036	179,382,299
Unfunded actuarial accrued liability	93,423,305	79,383,828
GASB 25/27 for fiscal year beginning July 1:		
Annual required contributions	\$9,991,587	\$9,257,251
Actual contributions	--	9,257,251
Percentage contributed	--	100.00%
Funded ratio	51.71%	55.75%
Demographic data for plan year beginning January 1:		
Number of retired participants and beneficiaries	594	596
Number of inactive participants entitled to a return of their employee contributions	155	170
Number of inactive participants with a vested right to a deferred or immediate benefit	28	22
Number of active participants	827	825
Total payroll	\$32,970,831	\$32,668,873
Average payroll	39,868	39,599

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

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 six valuations can be seen in this chart.

CHART 1
Participant Population: 2002 – 2009

Year Ended December 31	Active Participants	Inactive Participants	Retired Participants and Beneficiaries
2002	876	117	586
2003	839	129	607
2004	840	146	618
2005	831	170	614
2007	825	192	596
2009	827	183	594

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

Active Participants

Plan costs are affected by the age, years of service and payroll of active participants. In this year's valuation, there were 827 active participants with an average age of 47.9, average years of service of 11.5 years and average payroll of \$39,868. The 825 active participants in the prior valuation had an average age of 48.3, average service of 11.6 years and average payroll of \$39,599.

Among the active participants, there were none with unknown age and/or service information.

Inactive Participants

In this year's valuation, there were 28 participants with a vested right to a deferred or immediate vested benefit and 155 participants entitled to a return of their employee contributions.

These graphs show a distribution of active participants by age and by years of service.

CHART 2
Distribution of Active Participants by Age as of December 31, 2009

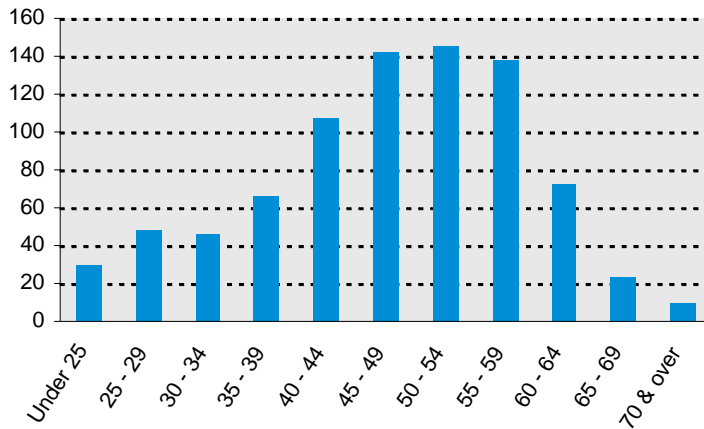
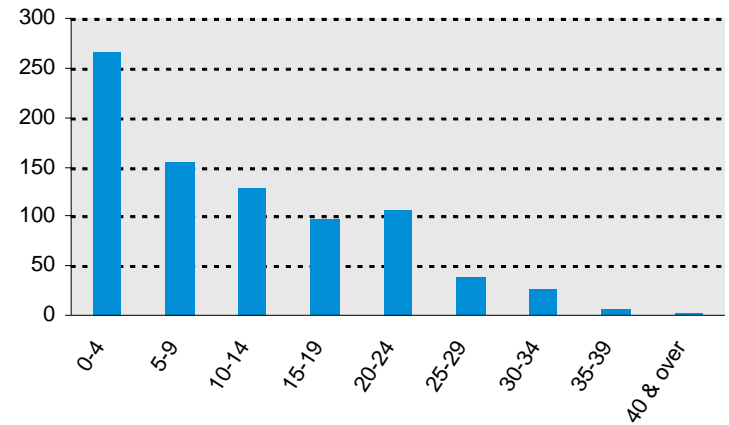


CHART 3
Distribution of Active Participants by Years of Service as of December 31, 2009



SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

Retired Participants and Beneficiaries

As of December 31, 2009, 594 retired participants and beneficiaries were receiving total monthly benefits of \$981,414, excluding COLAs reimbursed by the Commonwealth. For comparison, in the previous valuation, there were 596 retired participants and beneficiaries receiving monthly benefits of \$905,077, excluding COLAs reimbursed by the Commonwealth. There were no retired participants in suspended status this year and one retired participant in the prior valuation.

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

CHART 4
Distribution of Retired Participants and Beneficiaries by Type and by Monthly Amount as of December 31, 2009

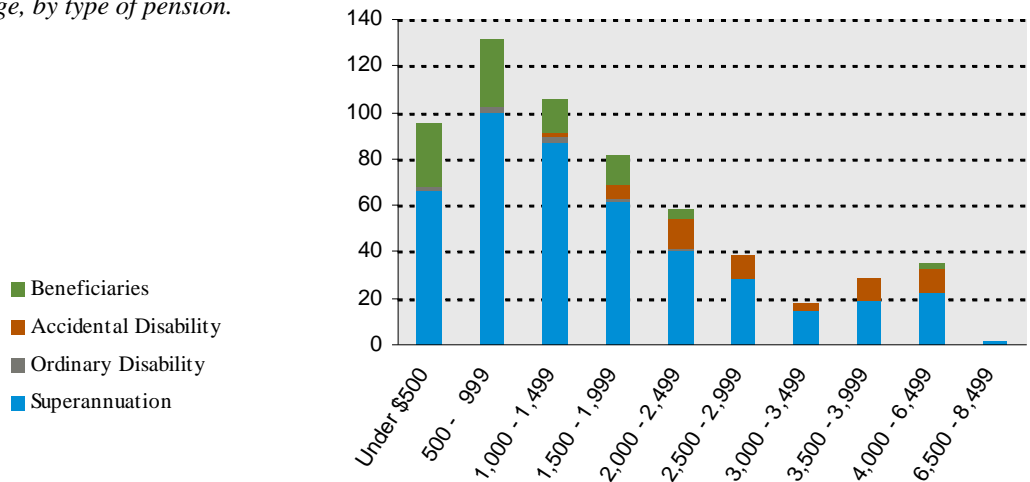
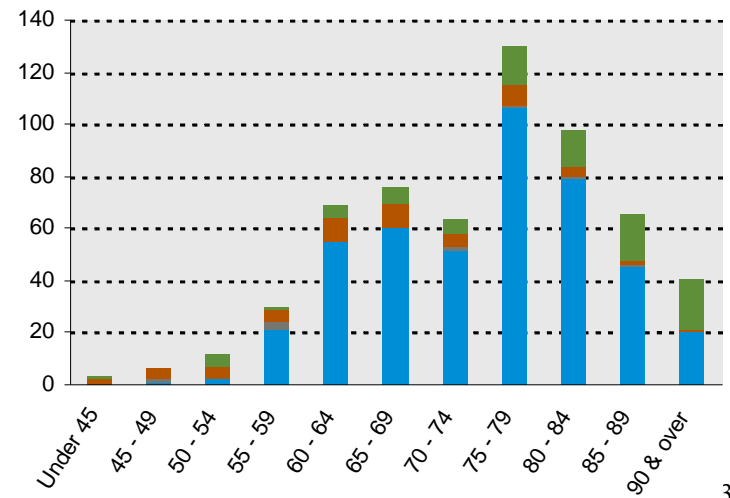


CHART 5
Distribution of Retired Participants and Beneficiaries by Type and by Age as of December 31, 2009



SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

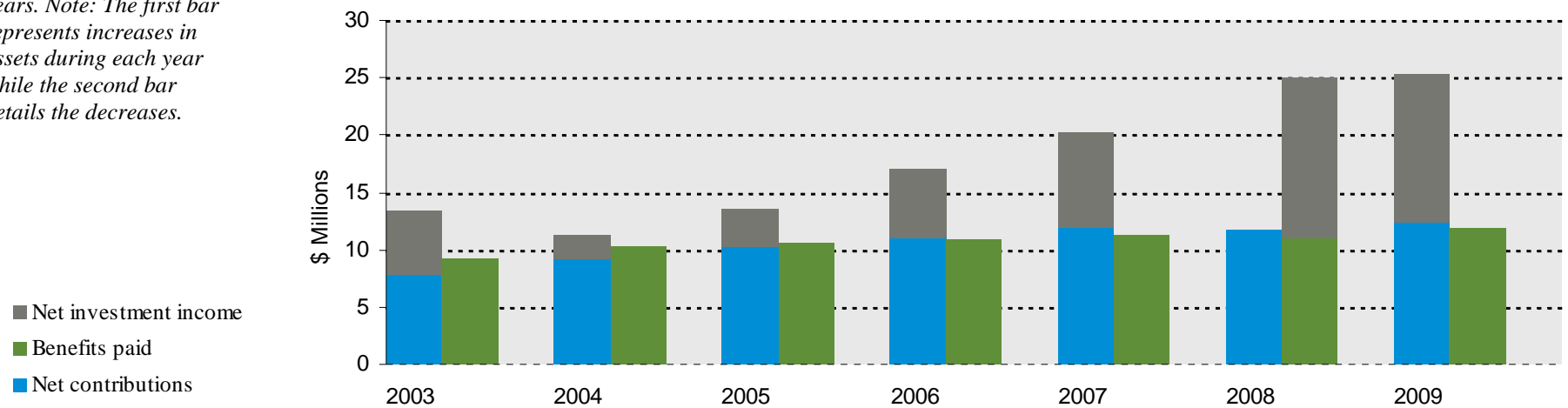
B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative expenses) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits C and D.

The chart depicts the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6
Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31, 2003 – 2009



SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

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, 2009	December 31, 2008
1. Market value of assets			\$83,372,276	\$72,196,529
2. Calculation of unrecognized return*	Original	Unrecognized		Unrecognized
	<u>Amount</u>	<u>Amount</u>		<u>Amount</u>
(a) Year ended December 31, 2009	\$3,596,896	\$2,877,517		N/A
(b) Year ended December 31, 2008	-37,373,222	-22,423,932		-\$29,898,578
(c) Year ended December 31, 2007	-2,711,455	-1,084,582		-1,626,873
(d) Year ended December 31, 2006	4,080,177	816,035		1,632,071
(e) Year ended December 31, 2005	-3,248,331	<u>N/A</u>		<u>-649,666</u>
(f) Total unrecognized return			-19,814,962	-30,543,047
3. Preliminary actuarial value: (1) - (2f)			103,187,238	102,739,576
4. Adjustment to be within 20% corridor			-3,140,507	-16,103,741
5. Final actuarial value of assets: (3) + (4)			<u>\$100,046,731</u>	<u>\$86,635,835</u>
6. Actuarial value as a percentage of market value: (5) ÷ (1)			120.0%	120.0%

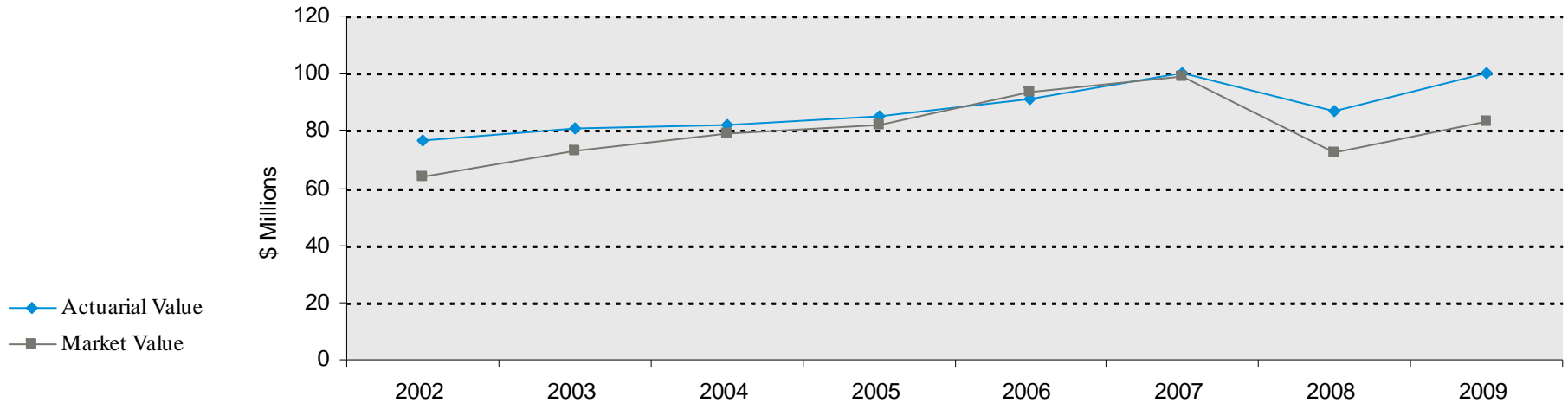
* Unrecognized return is the difference between the actual market return and the expected return on an actuarial value basis and is recognized over a five-year period.

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

Both the actuarial value and market value of assets are representations of the Salem Retirement System’s financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Salem Retirement System’s liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the market value over the past eight years.

CHART 8
Actuarial Value of Assets vs. Market Value of Assets as of December 31, 2002 – 2009



SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

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 experience loss for the two-year period ended December 31, 2009 is \$16,050,319. 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, 2009

1. Net loss from investments*	-\$16,433,198
2. Net gain from administrative expenses	158,948
3. Net gain from other experience**	<u>223,931</u>
4. Net experience loss: (1) + (2) + (3)	-\$16,050,319

* Details in Chart 10

**Details in Chart 13

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Salem Retirement System’s investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. The actual rate of return on an actuarial basis for the 2009 and 2008 plan years was 14.97% and -13.95%, respectively.

Since the actual return for the two-year period was less than the assumed return, the Salem Retirement System experienced an actuarial loss during the two-year period ending December 31, 2009 with regard to its investments of \$16,433,198.

This chart shows the gain/(loss) due to investment experience.

**CHART 10
Actuarial Value Investment Experience**

	Year Ended	
	December 31, 2009	December 31, 2008
1. Actual return	\$12,996,591	-\$13,989,510
2. Average value of assets	86,842,987	100,311,908
3. Actual rate of return: (1) ÷ (2)	14.97%	-13.95%
4. Assumed rate of return	8.25%	8.25%
5. Expected return: (2) x (4)	\$7,164,546	\$8,275,733
6. Actuarial gain/(loss): (1) – (5)	<u>\$5,832,045</u>	<u>-\$22,265,243</u>

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

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 seven years, including five-year and seven-year averages.

Based upon this experience and future expectations, we have maintained the assumed rate of return of 8.25%.

CHART 11

Investment Return – Actuarial Value vs. Market Value: 2003 - 2009

Year Ended December 31	Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent
2003	\$5,563,552	7.34%	\$10,814,423	17.16%
2004	2,177,899	2.72	6,590,555	9.07
2005	3,233,422	3.96	3,694,639	4.70
2006	6,050,918	7.13	11,296,361	13.73
2007	8,383,232	9.18	4,823,380	5.13
2008	-13,989,510	-13.95	-29,097,490	-28.81
2009	<u>12,996,591</u>	14.97	<u>10,761,442</u>	14.86
Total	\$24,416,104		\$18,883,310	
	Five-year average return	3.75%		0.37%
	Seven-year average return	4.06%		3.35%

Note: Each year's yield is weighted by the average asset value in that year.

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

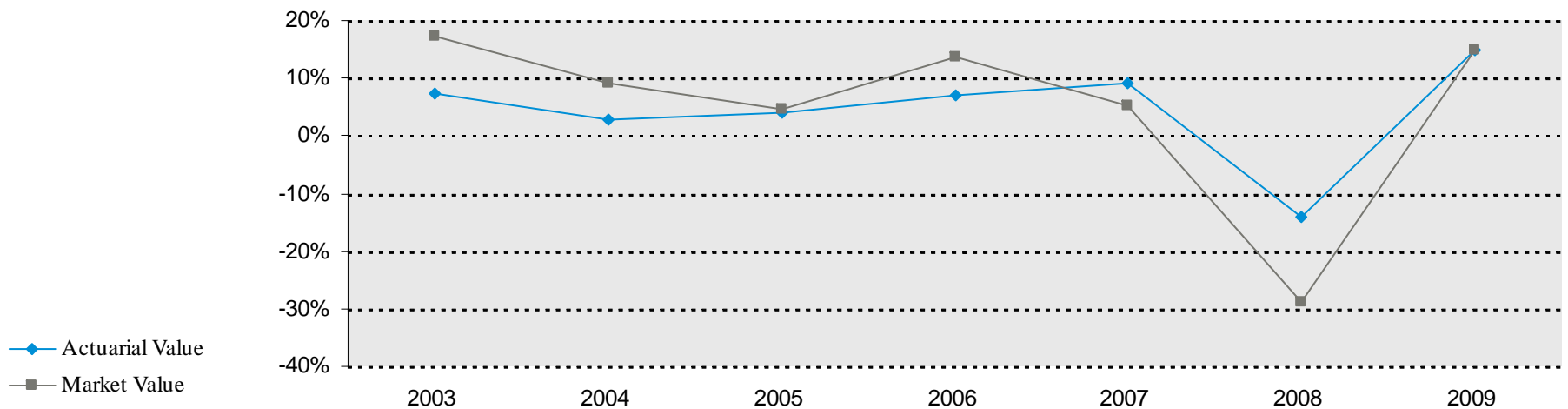
Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

Administrative Expenses

Administrative expenses for the years ending December 31, 2009 and 2008 were \$244,673 and \$365,143, respectively, compared to the assumption of \$386,650 and \$370,000, respectively. This resulted in a gain of \$158,948 for the two-year period including an adjustment for interest. Based on budgeted expenses, we have revised the assumption to \$350,000 for calendar 2010.

This chart illustrates how this leveling effect has actually worked over the years 2003 - 2009.

CHART 12
Market and Actuarial Rates of Return for Years Ended December 31, 2003 - 2009



SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

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 gain from this other experience for the two-year period ending December 31, 2009 amounted to \$223,931 which is 0.1% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience for the two-year period ending December 31, 2009 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent years.

CHART 13

Experience Due to Changes in Demographics for Two-Year Period Ended December 31, 2009

1. Fewer deaths than expects amongst retired members and beneficiaries	-\$263,102
2. Salary increases less than expected for continuing actives	2,892,114
3. Miscellaneous experience (including data adjustments and transfers)	<u>-2,405,081</u>
4. Total	\$223,931

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

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 2011 is equal to the City’s budgeted amount of \$9,991,587. This amount was based on a funding schedule that fully amortized the unfunded liability by June 30, 2025 with amortization payments that increased 3.5% per year.

In projecting the unfunded actuarial accrued liability for future fiscal years, the deferred investment losses have been reflected in accordance with the asset valuation method approved by the Board. As shown in the funding schedule in Section 3, Exhibit G, the unfunded liability increases significantly for the next three fiscal years. The appropriation increases by 4.5% per year and the System is projected to be fully funded by June 30, 2030. The fiscal 2012 appropriation is \$10,470,232.

The chart compares this valuation’s recommended contribution with the prior valuation.

CHART 14
Recommended Contribution

	Year Beginning January 1			
	2010		2008	
	Amount	% of Payroll	Amount	% of Payroll
1. Total normal cost	\$4,812,549	13.92%	\$5,081,493	14.77%
2. Administrative expenses	350,000	1.01%	370,000	1.08%
3. Expected employee contributions	<u>-3,117,765</u>	<u>-9.02%</u>	<u>-3,044,638</u>	<u>-8.85%</u>
4. Employer normal cost: (1) + (2) + (3)	\$2,044,784	5.91%	\$2,406,855	6.99%
5. Actuarial accrued liability	193,470,036		179,382,299	
6. Actuarial value of assets	<u>100,046,731</u>		<u>99,998,471</u>	
7. Unfunded actuarial accrued liability: (5) - (6)	\$93,423,305		\$79,383,828	
8. Employer normal cost projected to July 1, 2010 and 2008, adjusted for timing	2,091,075	5.93%	2,471,051	7.03%
9. Projected unfunded actuarial accrued liability	97,200,653		82,593,381	
10. Payment on projected unfunded actuarial accrued liability, adjusted for timing	6,673,711	18.93%	6,581,607	18.71%
11. Preliminary recommended contribution: (8) + (10), adjusted for timing	8,764,786	24.85%	\$9,052,658	25.74%
12. Budgeted appropriation, adjusted for timing, from prior valuation	9,991,587	28.33%	9,265,480	26.34%
13. Projected payroll	\$35,267,880		\$35,175,708	

Note: Budgeted appropriation and recommended contribution include adjustment for timing.

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

The preliminary contribution as of July 1, 2010 is based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Recommended Contribution

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15

Reconciliation of Recommended Contribution from July 1, 2008 to July 1, 2010

Recommended Contribution as of July 1, 2008	\$9,265,480
Effect of change in actuarial assumptions	-\$228,089
Effect of change in administrative expense assumption	-20,445
Effect of salary increases less than expected for continuing actives	-259,064
Effect of investment loss	1,472,018
Effect of other gains and losses on accrued liability	-20,955
Effect of change in amortization schedule	-2,057,322
Effect of net other changes	<u>614,163</u>
Total change	<u>-\$499,694</u>
Preliminary Contribution as of July 1, 2010	\$8,764,786
Budgeted Fiscal 2011 Appropriation	\$9,991,587

SECTION 2: Valuation Results for the City of Salem Contributory Retirement System

E. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to the GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded within the range of the GASB reporting requirements. Chart 16 below presents a graphical representation of this information for the Plan.

The other 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 under the GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. 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.

Although the GASB requires that the actuarial value of assets be used to determine the funded ratio, Chart 17 shows the funded ratio calculated using both the actuarial value of assets (51.71%) and the market value of assets (43.09%).

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits II, III, and IV.

These graphs show key GASB factors.

CHART 16
Required Versus Actual Contributions

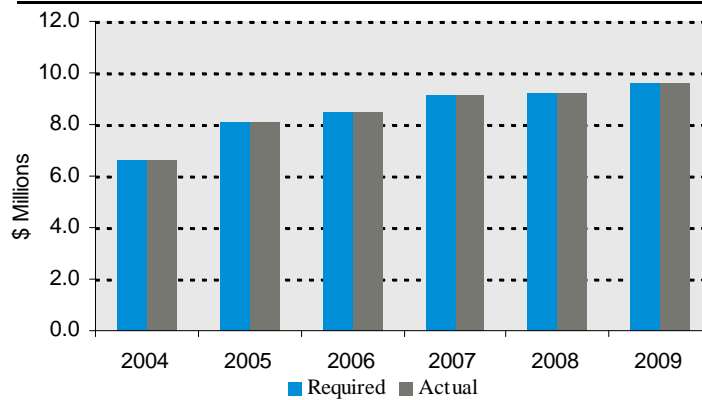
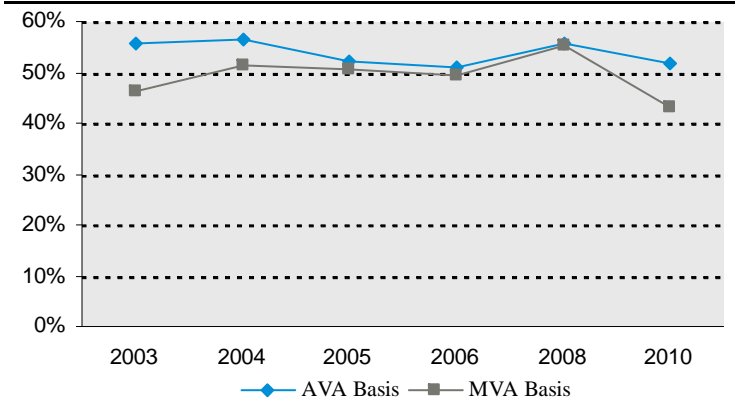


CHART 17
Funded Ratio



SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT A

Table of Plan Coverage

Category	Year Ended December 31		Change From Prior Year
	2009	2007	
Active participants in valuation:			
Number	827	825	0.2%
Average age	47.9	48.3	N/A
Average service	11.5	11.6	N/A
Total payroll	\$32,970,831	\$32,668,873	0.9%
Average payroll	39,868	39,599	0.7%
Account balances	31,355,651	29,656,373	5.7%
Inactive participants entitled to a return of their contributions	155	170	-8.8%
Inactive participants with a vested right to a deferred or immediate benefit	28	22	27.3%
Retired participants:			
Number in pay status	441	435	1.4%
Average age	74.7	74.7	N/A
Average monthly benefit	\$1,621	\$1,505	7.7%
Number in suspended status	0	1	-100.0%
Disabled participants:			
Number in pay status	63	63	0.0%
Average age	65.9	66.9	N/A
Average monthly benefit	\$2,800	\$2,444	14.6%
Beneficiaries in pay status	90	98	-8.2%

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT B

**Participants in Active Service as of December 31, 2009
By Age, Years of Service, and Average Payroll**

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	29	29	--	--	--	--	--	--	--	--
	\$19,592	\$19,592	--	--	--	--	--	--	--	--
25 - 29	48	47	--	1	--	--	--	--	--	--
	\$25,816	\$25,475	--	\$41,836	--	--	--	--	--	--
30 - 34	46	29	14	3	--	--	--	--	--	--
	\$35,222	\$29,567	\$42,617	\$55,376	--	--	--	--	--	--
35 - 39	66	28	18	14	6	--	--	--	--	--
	\$41,060	\$26,296	\$46,982	\$57,378	\$54,121	--	--	--	--	--
40 - 44	107	36	19	18	17	16	1	--	--	--
	\$46,058	\$27,313	\$31,575	\$51,594	\$68,448	\$75,221	\$49,147	--	--	--
45 - 49	142	34	31	22	17	34	4	--	--	--
	\$43,380	\$22,818	\$29,589	\$40,616	\$60,067	\$67,214	\$66,726	--	--	--
50 - 54	145	22	22	29	27	25	15	5	--	--
	\$44,149	\$23,921	\$32,631	\$35,256	\$43,273	\$62,789	\$71,278	\$65,555	--	--
55 - 59	138	30	35	26	15	8	9	11	4	--
	\$38,897	\$21,024	\$28,512	\$38,797	\$38,461	\$48,113	\$65,055	\$79,222	\$77,930	--
60 - 64	73	8	11	10	11	17	7	5	3	1
	\$42,116	\$31,884	\$37,167	\$41,850	\$49,705	\$33,821	\$46,518	\$65,717	\$51,275	\$62,327
65 - 69	23	1	5	5	2	4	1	4	--	1
	\$38,611	\$20,618	\$22,574	\$33,755	\$42,852	\$27,233	\$88,207	\$48,470	--	\$109,070
70 & over	10	2	1	--	2	2	1	2	--	--
	\$29,344	\$31,544	\$42,819	--	\$27,895	\$27,448	\$11,310	\$32,771	--	--
Total	827	266	156	128	97	106	38	27	7	2
	\$39,868	\$23,811	\$33,589	\$42,593	\$50,959	\$58,323	\$63,049	\$66,194	\$66,507	\$85,699

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT C

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended December 31, 2009	Year Ended December 31, 2008
Contribution income:		
Employer contributions	\$9,628,758	\$9,257,251
Employee contributions	2,996,026	2,811,235
Less administrative expenses	<u>-244,673</u>	<u>-365,143</u>
Net contribution income	\$12,380,111	\$11,703,343
Net investment income	<u>12,996,591</u>	<u>-13,989,510</u>
Total income available for benefits	\$25,376,702	-\$2,286,167
Less benefit payments:		
Pensions	-\$11,356,501	-\$10,618,788
Net 3(8)(c) reimbursements	-332,145	-158,238
Refunds, annuities, & Option B refunds	<u>-277,160</u>	<u>-299,443</u>
Net benefit payments	-\$11,965,806	-\$11,076,469
Change in reserve for future benefits	\$13,410,896	-\$13,362,636

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT D

Development of the Fund Through December 31, 2009

Year Ended December 31	Employer Contributions	Employee Contributions	Other Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2003	\$5,655,234	\$2,426,100	\$31,120	\$5,563,552	\$303,972	\$9,151,909	\$80,659,011
2004	6,617,862	2,860,514	14,635	2,177,899	313,259	10,215,286	81,801,377
2005	8,022,361	2,647,749	30,195	3,233,422	407,230	10,531,830	84,796,044
2006	8,468,103	2,848,916	0	6,050,918	312,365	10,804,187	91,047,430
2007	9,176,126	3,112,895	0	8,383,232	401,427	11,319,785	99,998,471
2008	9,257,251	2,811,235	0	-13,989,510	365,143	11,076,469	86,635,835
2009	9,628,758	2,996,026	0	12,996,591	244,673	11,965,806	100,046,731

* *Net of investment fees*

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT E

Development of Unfunded Actuarial Accrued Liability

	Year Ended	
	December 31, 2009	December 31, 2008
1. Unfunded actuarial accrued liability at beginning of year	\$77,585,939	\$77,785,674
2. Normal cost at beginning of year	5,696,810	5,451,493
3. Total contributions	-12,624,784	-12,068,486
4. Interest		
(a) For whole year on (1) + (2)	\$6,870,827	\$6,867,066
(b) For half year on (3)	<u>-470,543</u>	<u>-449,808</u>
(c) Total interest	<u>6,400,284</u>	<u>6,417,258</u>
5. Expected unfunded actuarial accrued liability	\$77,058,249	\$77,585,939
6. Changes due to:		
(a) Investment loss	\$16,433,198	--
(b) Administrative expense gain	-158,948	--
(c) Retiree mortality loss	263,102	--
(d) Continuing active salary gain	-2,892,114	--
(e) Miscellaneous loss	2,405,081	--
(f) Assumption changes	<u>314,737</u>	--
(c) Total changes	<u>16,365,056</u>	--
7. Unfunded actuarial accrued liability at end of year	<u>\$93,423,305</u>	--

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT F

Table of Amortization Bases as of July 1, 2010

Type	Annual Payment	Years Remaining	Outstanding Balance
2002 ERI	\$56,445	20.00	\$824,391
2003 ERI	147,125	20.00	2,148,786
Remaining unfunded liability	<u>6,451,641</u>	20.00	<u>94,227,476</u>
Total	\$6,655,211		\$97,200,653

Notes: Payments assumed to be made on July 1

Amortization payments increase at 4.5% per year.

Does not reflect adjustment to set fiscal 2011 appropriation to the budgeted appropriation from the prior valuation.

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT G

Funding Schedule

(1) Fiscal Year Ended June 30	(2) Employer Normal Cost	(3) Amortization of ERI Liability	(4) Amortization of Remaining Liability	(5) Total Plan Cost: (2) + (3) + (4)	(6) Total Unfunded Actuarial Accrued Liability at Beginning of Fiscal Year	(7) Total Plan Cost: % Increase
2011	\$2,091,075	\$204,136	\$7,696,376	\$9,991,587	\$97,200,653	3.77%
2012	2,174,718	213,321	8,082,193	10,470,232	100,721,773	4.79%
2013	2,261,707	222,921	8,456,751	10,941,379	108,480,842	4.50%
2014	2,352,175	232,953	8,848,613	11,433,741	116,012,393	4.50%
2015	2,446,262	243,436	9,258,561	11,948,259	115,947,306	4.50%
2016	2,544,112	254,390	9,687,429	12,485,931	116,163,959	4.50%
2017	2,645,876	265,837	10,136,085	13,047,798	115,616,884	4.50%
2018	2,751,711	277,800	10,605,438	13,634,949	114,250,261	4.50%
2019	2,861,779	290,302	11,096,441	14,248,522	111,927,444	4.50%
2020	2,976,250	303,365	11,610,090	14,889,705	108,869,461	4.50%
2021	3,095,300	317,017	12,147,425	15,559,742	104,990,607	4.50%
2022	3,219,112	331,283	12,709,535	16,259,930	100,196,958	4.50%
2023	3,347,876	346,191	13,297,560	16,991,627	94,385,635	4.50%
2024	3,481,791	361,770	13,912,689	17,756,250	87,444,011	4.50%
2025	3,621,063	378,049	14,556,169	18,555,281	79,248,853	4.50%
2026	3,765,906	395,061	15,229,302	19,390,269	69,665,385	4.50%
2027	3,916,542	412,839	15,933,450	20,262,831	58,546,268	4.50%
2028	4,073,204	431,417	16,670,038	21,174,659	45,730,504	4.50%
2029	4,236,132	450,831	17,440,555	22,127,518	31,042,239	4.50%
2030	4,405,577	471,118	13,819,287	18,734,396	14,289,461	-15.33%

Notes: Reflects deferred investment gains and losses in accordance with the asset valuation method.

2011 payment is budgeted appropriation from prior valuation.

Payments are adjusted for timing.

Normal cost assumed to increase at 4.0% per year.

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT H

Department Statistics as of January 1, 2010

Category	Water	South Essex Sewerage	Housing	North Shore Regional VOC	City	Total
Active participants in valuation						
Number	12	62	25	40	688	827
Average age	54.1	52.0	49.9	48.2	47.3	47.9
Average service	23.8	16.2	11.5	7.7	11.0	11.5
Total payroll	\$811,195	\$3,458,769	\$1,194,749	\$1,232,010	\$26,274,108	\$32,970,831
Average payroll	67,600	55,787	47,790	30,800	38,189	39,868
Inactive participants entitled to a return of their employee contributions						
	0	2	3	19	131	155
Inactive participants with a vested right to a deferred or immediate benefit						
	0	3	1	1	23	28
Retired participants and beneficiaries in pay status						
Retired participants	8	22	14	10	387	441
Disabled participants	0	1	1	1	60	63
Beneficiaries	2	3	2	1	82	90
Total number in pay status	10	26	17	12	529	594
Total monthly benefits	\$13,487	\$53,758	\$24,167	\$13,885	\$876,117	\$981,414
Average monthly benefit	1,349	2,068	1,422	1,157	1,656	1,652

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

**EXHIBIT I
Department Results**

Category	Water	South Essex Sewerage	Housing	North Shore Regional VOC	City	Salem Retirement Board	Total
1. Total normal cost	\$81,255	\$411,003	\$156,650	\$178,532	\$3,961,393	\$23,716	\$4,812,549
2. Administrative expenses	5,909	29,891	11,393	12,984	288,098	1,725	350,000
3. Expected employee contributions	<u>-68,382</u>	<u>-329,853</u>	<u>-111,153</u>	<u>-114,662</u>	<u>-2,475,141</u>	<u>-18,574</u>	<u>-3,117,765</u>
4. Employer normal cost: (1) + (2) + (3)	\$18,782	\$111,041	\$56,890	\$76,854	1,774,350	\$6,867	\$2,044,784
5. Employer normal cost as a percent of payroll	2.21%	3.06%	4.54%	5.96%	6.48%	3.61%	5.91%
6. Actuarial accrued liability	\$4,465,158	\$15,965,634	\$5,407,074	\$3,808,660	\$162,944,848	\$878,662	\$193,470,036
7. Actuarial value of assets	<u>2,297,184</u>	<u>8,906,705</u>	<u>2,677,217</u>	<u>1,934,389</u>	<u>83,773,925</u>	<u>457,312</u>	<u>100,046,731</u>
8. Unfunded actuarial accrued liability: (6) – (7)	\$2,167,974	\$7,058,929	\$2,729,857	\$1,874,271	\$79,170,923	\$421,350	\$93,423,305
9. Reallocation of Retirement Board unfunded actuarial accrued liability	<u>9,822</u>	<u>31,981</u>	<u>12,368</u>	<u>8,491</u>	<u>358,688</u>	<u>-421,350</u>	<u>0</u>
10. Unfunded actuarial accrued liability with reallocation: (8) + (9)	\$2,177,796	\$7,090,910	\$2,742,225	\$1,882,762	\$79,529,611	\$0	\$93,423,305
11. Reallocation of Retirement Board normal cost	63	374	192	259	5,979	-6,867	0
12. Employer normal cost with reallocation: (4) + (11)	18,845	111,415	57,082	77,113	1,780,329	0	2,044,784
13. Employer normal cost projected to July 1, 2010	19,219	113,621	58,212	78,640	1,815,587	0	2,085,279
14. 2002 ERI payments	0	33,219	18,747	4,478	0	0	56,444
15. 2003 ERI payments	3,664	0	0	2,075	141,386	0	147,125
16. Payment on remaining liability	<u>170,482</u>	<u>540,433</u>	<u>213,051</u>	<u>163,546</u>	<u>6,586,658</u>	<u>0</u>	<u>7,674,170</u>
17. Budgeted appropriation for fiscal 2011: (13) + (14) + (15) + (16)	\$193,365	\$687,273	\$290,010	\$248,739	\$8,543,631	\$0	\$9,963,018
18. Payment date	August 1	August 1	August 1	June 30	July 1	N/A	N/A
19. Adjustment for timing	1.006875	1.006875	1.006875	1.082500	1.000000	0	0
20. Fiscal 2011 appropriation with reallocation, adjusted for timing: (17) x (19)	\$194,694	\$691,998	\$292,004	\$269,260	\$8,543,631	\$0	\$9,991,587
21. Fiscal 2012 appropriation with reallocation, adjusted for timing	215,424	749,493	302,540	267,271	8,935,504	0	10,470,232
22. Fiscal 2013 appropriation with reallocation, adjusted for timing	225,275	783,426	316,149	279,087	9,337,442	0	10,941,379

Notes: Administrative expenses allocated in proportion to total normal cost.

Actuarial value of assets allocated in proportion to actuarial accrued liability less present value of future ERI payments and adjusted for additional contributions by South Essex Sewerage.

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

EXHIBIT J

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) Turnover 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 equivalent of the accumulated normal costs allocated to the years before the valuation date.

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.

SECTION 3: Supplemental Information for the City of Salem Contributory Retirement System

**Amortization of the unfunded
actuarial accrued liability:**

Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment return:

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

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 90 beneficiaries in pay status)	594
2	Participants active during the year ended December 31, 2009 with total accumulated contributions of \$31,355,651 and projected payroll of \$34,583,002	827
3	Inactive participants with a right to a return of their employee contributions as of December 31, 2009	155
4	Inactive participants with a vested right to a deferred or immediate benefit as of December 31, 2009	28

The actuarial factors as of January 1, 2010 are as follows:

1.	Normal cost, including administrative expenses		\$5,162,549
2.	Expected employer contributions		<u>-3,117,765</u>
3.	Employer normal cost: (1) + (2)		\$2,044,784
4.	Actuarial accrued liability		193,470,036
	Retired participants and beneficiaries	\$98,970,528	
	Active participants	91,631,593	
	Inactive participants	2,867,915	
5.	Actuarial value of assets (\$83,372,276 at market value)		100,046,731
6.	Unfunded actuarial accrued liability: (4) - (5)		<u>93,423,305</u>

The actuarial factors projected to July 1, 2010 are as follows:

1.	Employer normal cost projected to July 1, 2010, adjusted for timing	\$2,091,075
2.	Projected unfunded actuarial accrued liability	97,200,653
3.	Payment on projected unfunded actuarial accrued liability, adjusted for timing	6,673,711
4.	Preliminary recommended contribution: (1) + (3), adjusted for timing	8,764,786
5.	Budgeted appropriation, adjusted for timing, from prior valuation	9,991,587
6.	Projected payroll	35,267,880
7.	Total budgeted appropriation as a percentage of projected payroll: (5) ÷ (6)	28.33%

*Notes: Recommended contribution and budgeted appropriation include adjustment for timing.
Amortization payments increase at 4.5% per year.*

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

EXHIBIT II

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Plan Year Ended December 31	Annual Required Contributions	Actual Contributions	Percentage Contributed
2004	\$6,617,862	\$6,617,862	100.0%
2005	8,052,556	8,052,556	100.0%
2006	8,468,103	8,468,103	100.0%
2007	9,176,126	9,176,126	100.0%
2008	9,257,251	9,257,251	100.0%
2009	9,628,758	9,628,758	100.0%

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

EXHIBIT III

Supplementary Information Required by the 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)
01/01/1997	\$51,236,360	\$82,440,774	\$31,204,414	62.15%	\$22,930,939	136.08%
01/01/1999	68,563,143	111,294,953	42,731,810	61.60%	25,411,629	168.16%
01/01/2001	73,727,923	117,334,727	43,606,804	62.84%	29,072,187	149.99%
01/01/2003	76,438,885	137,111,559	60,672,674	55.75%	31,089,195	195.16%
01/01/2004	80,659,012	142,499,185	61,840,173	56.60%	29,355,291	210.66%
01/01/2005	81,801,377	156,479,479	74,678,102	52.28%	31,328,083	238.37%
01/01/2006	84,796,044	166,958,606	82,162,562	50.79%	32,824,144	250.31%
01/01/2008	99,998,471	179,382,299	79,383,828	55.75%	34,410,002	230.70%
01/01/2010	100,046,731	193,470,036	93,423,305	51.71%	34,583,002	270.14%

* Not less than zero

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

EXHIBIT IV

Supplementary Information Required by the GASB

Valuation date	January 1, 2010
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Increasing at 4.5% per year
Remaining amortization period	20 years remaining as of January 1, 2010
Asset valuation method	The difference between the expected return on an actuarial basis and actual investment return on a market value basis is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Projected salary increases	5.0% (previously 5.50%)
Cost of living adjustments	3.00% for first \$12,000 of retirement income
Plan membership:	
Retired participants and beneficiaries receiving benefits	594
Terminated participants entitled to a return of their employee contributions	155
Terminated participants with a vested right to a deferred or immediate benefit	28
Active participants	<u>827</u>
Total	1,604

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

<i>Pre-Retirement:</i>	RP-2000 Employee Mortality Table projected 10 years with Scale AA (gender distinct) (previously, RP-2000 Employee Mortality Table)
<i>Healthy Retiree:</i>	RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA (gender distinct) (previously, RP-2000 Healthy Annuitant Mortality Table)
<i>Disabled Retiree:</i>	RP-2000 Health Annuitant Mortality Table set forward 3 years for males only (gender distinct) (previously, RP-2000 Healthy Annuitant Mortality Table set forward 2 years)

Termination Rates before Retirement:

Groups 1 and 2 – Rate (%)

Mortality

Age	Male	Female	Disability
20	0.03	0.02	0.01
25	0.03	0.02	0.02
30	0.04	0.01	0.03
35	0.07	0.03	0.06
40	0.10	0.06	0.10
45	0.13	0.10	0.15
50	0.18	0.14	0.19
55	0.24	0.23	0.24
60	0.42	0.37	0.28

*Notes: 55% of the disability rates shown represent accidental disability.
 20% of the accidental disabilities will die from the same cause as the disability.
 55% of the death rates shown represent accidental death.*

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

Termination Rates before Retirement (continued):

Age	Group 4 – Rate (%)		
	Mortality		Disability
	Male	Female	
20	0.03	0.02	0.10
25	0.04	0.02	0.20
30	0.04	0.03	0.30
35	0.08	0.05	0.30
40	0.11	0.07	0.30
45	0.15	0.11	1.00
50	0.21	0.17	1.25
55	0.36	0.27	1.20
60	0.67	0.51	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.
 90% of the death rates shown represent accidental death.*

Withdrawal Rates:

Years of Service	Rate per year (%)	
	Groups 1 and 2	Years of Service Group 4
0	15.0	0 – 10 1.5
1	12.0	11+ 0.0
2	10.0	
3	9.0	
4	8.0	
5 – 9	7.6	
10 – 14	5.4	
15 – 19	3.3	
20 – 24	2.0	
25 - 29	1.0	
30+	0.0	

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

Retirement Rates:	Rate per year (%)			Group 4
	Age	Groups 1 and 2		
		Male	Female	
	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	--

Unknown Data for Participants:	Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.
Age of Spouse:	Female (or male) spouses 3 years younger (or older) than their spouses.
Percent Married:	80%
Net Investment Return:	8.25%
Interest on Employee Contributions:	3.5%
Investment Expenses:	\$350,000 for calendar 2010 (previously, \$370,000 for calendar 2008)
Salary Increases:	5.0% (previously, 5.5%)

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

2009 Salary:	Salary reported in the data, except for employees missing salaries, whose salary was estimated from contributions.
Total Service:	Total creditable service reported in the data.
Actuarial Value of Assets:	Market value of assets 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 actuarial value return and is recognized 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.
Changes in Assumptions:	Based on past experience and future expectations the following actuarial assumptions were changed: <ul style="list-style-type: none">➤ The administrative expense assumption was lowered from \$370,000 for calendar 2008 to \$350,000 for calendar 2010.➤ The salary scale was lowered from 5.5% to 5.0%.➤ The pre-retirement mortality table was changed from the RP-2000 Employee Mortality Table to the RP-2000 Employee Mortality Table projected 10 years with Scale AA.➤ The healthy retiree mortality table was changed from the RP-2000 Healthy Annuitant Mortality Table to the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA.➤ The disabled retiree mortality table was changed from the RP-2000 Healthy Annuitant Mortality Table set forward 2 years to the RP-2000 Health Annuitant Mortality Table set forward 3 years for males only.

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

EXHIBIT VI

Summary of Plan Provisions

This exhibit summarizes the major provisions of Chapter 32 of the Laws of Massachusetts.

Plan Year: January 1 – December 31

Retirement Benefits

Employees covered by the Contributory Retirement Law are classified into one of four groups depending on job classification. Group 1 comprises most positions in state and local government. It is the general category of public employees. Group 4 comprises mainly police and firefighters. Group 2 is for other specified hazardous occupations. (Officers and inspectors of the State Police are classified as Group 3.)

The annual amount of the retirement allowance is based on the member’s final three-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 table based on the age of the member at retirement:

Age Last Birthday at Date of Retirement			
Percent	Group 1	Group 2	Group 4
2.5	65 or over	60 or over	55 or over
2.4	64	59	54
2.3	63	58	53
2.2	62	57	52
2.1	61	56	51
2.0	60	55	50
1.9	59	--	49
1.8	58	--	48
1.7	57	--	47
1.6	56	--	46
1.5	55	--	45

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

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

annual rate of regular compensation received during the last three years of creditable service prior to retirement. The \$30,000 cap on salary used in a benefit determination for any employee hired after January 1, 1979 has been removed.

The maximum annual amount of the retirement allowance is 80 percent of the member's final three-year average salary. Any member who is a veteran also receives an additional yearly retirement allowance of fifteen dollars per year of creditable service, not exceeding three hundred dollars. The veteran allowance is paid in addition to the 80 percent maximum.

Employee Contributions

Employees hired before January 1, 1975 contribute 5 percent of their salary; employees hired after December 31, 1974 and before January 1, 1984 contribute 7 percent; employees hired after January 1, 1984 contribute 8 percent; employees hired after July 1, 1996 contribute 9 percent. In addition, employees hired after December 31, 1978 contribute an additional 2 percent of salary in excess of \$30,000.

Employees hired after 1983 who leave with less than five years of credited service receive no interest on their contributions and employees who leave with five but less than ten years receive one-half the rate of regular interest otherwise payable.

Retirement Benefits (Superannuation)

Members of Group 1, 2 or 4 may retire upon the attainment of age 55. For retirement at ages below 55, twenty years of creditable service is required.

Members 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).

Ordinary Disability Benefits

A member who is unable to perform his/her job due to a non-occupational disability will receive a retirement allowance if he 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, based on the amount of creditable service at the date of disability. For veterans, there is a minimum benefit

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

of 50 percent of the member's most recent year's pay plus an annuity based on his 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 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.

Death Benefits

In general, the beneficiary of an employee who dies in active service will receive a refund of the employee's own contributions. Alternatively, if the employee were eligible to retire on the date of his death, a spouse's benefit will be paid the full amount the employee would have received under Option C (previously, two-thirds of the amount). The surviving spouse of a member who dies with two or more years of credited service has the option of a refund of the employee's contributions or a monthly benefit regardless of eligibility to retire, if they were married for at least one year. There is also a minimum widow's pension of \$500 per month, and there are additional amounts for surviving children.

If an employee's death is job-connected, the spouse will receive 72 percent of the member's most recent annual pay in addition to a refund of the member's accumulated deductions, plus additional amounts for surviving children. However, in accordance with Section 100 of Chapter 32, the surviving spouse of a police officer, firefighter or corrections officer is killed in the line of duty will be eligible to receive an annual benefit equal to the maximum salary held by the member at the time of death.

"Heart And Lung Law" And Cancer Presumption

Any case of hypertension or heart disease resulting in total or partial disability or death to a uniformed fireman, permanent member of a police department, or certain employees of a county correctional facility is presumed to have been suffered in the line of duty, unless the contrary is shown by competent evidence. Any case of disease of the lungs or respiratory tract resulting in total disability or death to a uniformed fireman is presumed to have been suffered in the line of duty, unless the contrary is

SECTION 4: Reporting Information for the City of Salem Contributory Retirement System

shown by competent evidence. There is an additional presumption for uniformed firemen that certain types of cancer are job-related if onset occurs while actively employed or within five years of retirement.

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 his death any of his contributions not expended for annuity payments will be refunded to his beneficiary. Option C allows the member to take a lesser retirement allowance in exchange for providing his survivor with two-thirds of the lesser amount. Option C pensioners will have their 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 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:

There have been no changes in plan provisions since the last valuation.