

Town of Reading Retirement System

Actuarial Valuation and Review as of
July 1, 2011

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November 21, 2011

*Retirement Board
Town of Reading Retirement System
16 Lowell Street
Reading, MA 01867-2693*

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2011. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2012 and later years and analyzes the preceding two years' experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Retirement System. The census information and financial information on which our calculations were based was prepared by the staff of the Town of Reading Retirement System. That assistance is gratefully acknowledged.


The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The actuarial calculations were directed under my supervision. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in my 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

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SECTION 1: Valuation Summary for the Town of Reading Retirement System

Purpose

This report has been prepared by The Segal Company to present a valuation of the Town of Reading Retirement System as of July 1, 2011. 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 July 1, 2011;
- The assets of the Plan as of June 30, 2011;
- 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 July 1, 2011 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 June 30, 2011 and June 30, 2010, the market value rate of return was 22.30% and 12.64%, respectively. Because the actuarial value of assets gradually recognizes market value fluctuations, the actuarial rates of return for the plan years ended 2011 and 2010 were 8.00% and 4.94%, respectively. The actuarial value of assets as of June 30, 2011 was \$91,359,151 or 99.1% of the market value of assets. As of June 30, 2009, the actuarial value of assets was 120.0% of market value.
- The unfunded liability has increased from \$38.8 million as of July 1, 2009 to \$43.1 million as of July 1, 2011. The unfunded liability was expected to increase \$0.9 million. The additional increase of \$3.4 million is due to an investment loss on an actuarial basis of \$2.1 million over the two-year period, a \$2.0 million loss from newly disabled participants and employees transferring into the System with high service from other municipalities, and changes in assumptions described below, partially offset by a \$3.2 million gain from salary increases less than expected.

SECTION 1: Valuation Summary for the Town of Reading Retirement System

- This valuation reflects the following the assumption changes:
 - The administrative expense assumption was increased from \$75,000 for the year beginning July 1, 2009 to \$87,000 for the year beginning July 1, 2011, based on the projected 2011 budget.
 - The mortality table for healthy participants was changed from the RP-2000 Combined Healthy Mortality Table to the RP-2000 Employee Mortality Table projected 10 years with Scale AA for non-retired participants and the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA for retired participants.
 - The mortality table for disabled participants was changed from the RP-2000 Combined Healthy Mortality Table set forward 5 years to the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA set forward 5 years.

Changing these assumptions resulted in a net increase in the unfunded liability of \$2,280,878 and an increase in the employer normal cost of \$32,672.

- The Town of Reading Retirement System has elected to increase the Section 101 supplemental annual allowance from \$6,000 per year to \$9,000 per year.
- Because the fiscal 2012 appropriation has been set to the previously budgeted amount of \$4,420,234 based on the July 1, 2009 actuarial valuation, the results of this valuation will first be reflected in the fiscal 2013 appropriation of \$4,543,434. The current funding schedule amortizes the unfunded liability by June 30, 2030 with amortization payments that increase 4.50% per year. The prior funding schedule amortized the unfunded liability by June 30, 2028 with amortization payments that increased 4.50% per year. The fiscal 2013 appropriation represents a 2.79% increase from the fiscal 2012 appropriation. However, the Town only portion of the appropriation, which is shown on page 20 of the report (School and All Other), increases 3.92% from \$3,007,986 to \$3,125,885.

SECTION 1: Valuation Summary for the Town of Reading Retirement System

Summary of Key Valuation Results

	2011	2009
Contributions for plan year beginning July 1:		
Recommended for fiscal 2012 and 2010	\$4,420,234	\$3,686,795
Recommended for fiscal 2013 and 2011	4,543,434	4,229,889
Recommended for fiscal 2014 and 2012	4,747,889	4,420,234
Funding elements for plan year beginning July 1:		
Normal cost, including administrative expenses	\$3,241,661	\$3,172,122
Market value of assets	92,219,308	69,306,002
Actuarial value of assets	91,359,151	83,167,202
Actuarial accrued liability	134,440,050	121,918,447
Unfunded actuarial accrued liability	43,080,899	38,751,245
GASB 25/27 for plan year beginning July 1:		
Annual required contributions (ARC)	\$4,420,234	\$3,686,795
Actual contributions	--	3,686,795
Percentage of ARC contributed	--	100.00%
Funded ratio	67.96%	68.22%
Covered payroll	\$20,934,376	\$21,004,628
Demographic data for plan year beginning July 1:		
Number of retired participants and beneficiaries	329	317
Number of inactive participants entitled to a return of their employee contributions	19	19
Number of inactive participants with a vested right to a deferred or immediate benefit	10	9
Number of active participants	333	356
Total payroll	\$19,937,502	\$20,004,408
Average payroll	59,872	56,192

SECTION 2: Valuation Results for the Town of Reading 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 nine valuations can be seen in this chart.

CHART 1
Participant Population: 1995 – 2011

Year Ended June 30	Active Participants	Inactive Participants	Retired Participants and Beneficiaries
1995	394	25	297
1997	375	33	299
1999	376	33	320
2001	365	20	325
2003	349	21	328
2005	352	22	328
2007	352	22	327
2009	356	28	317
2011	333	29	329

SECTION 2: Valuation Results for the Town of Reading 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 333 active participants with an average age of 48.6, average years of service of 15.0 years and average payroll of \$59,872. The 356 active participants in the prior valuation had an average age of 48.2, average service of 14.4 years and average payroll of \$56,192.

Among the active participants, there were none with unknown age.

Inactive Participants

In this year's valuation, there were 10 participants with a vested right to a deferred or immediate vested benefit and 19 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 June 30, 2011

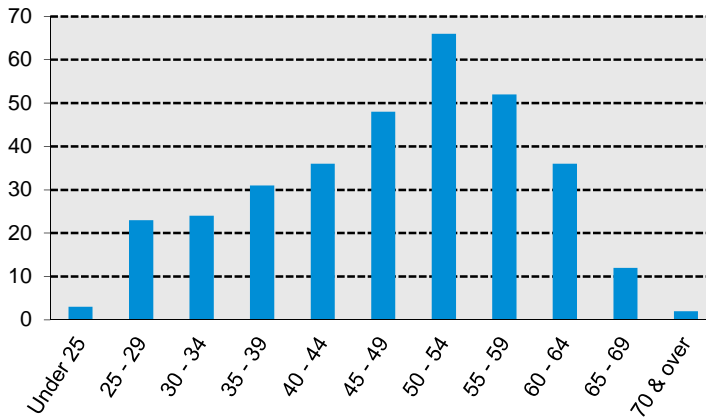
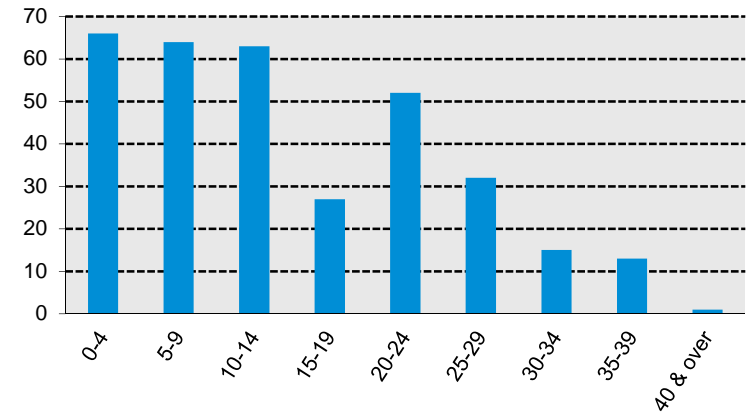


CHART 3
Distribution of Active Participants by Years of Service as of June 30, 2011



SECTION 2: Valuation Results for the Town of Reading Retirement System

Retired Participants and Beneficiaries

As of June 30, 2011, 284 retired participants and 45 beneficiaries were receiving total monthly benefits of \$625,289, excluding COLAs reimbursed by the Commonwealth. For comparison, in the previous valuation, there were 274 retired participants and 43 beneficiaries receiving monthly benefits of \$546,927, 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.

CHART 4
Distribution of Retired Participants and Beneficiaries by Type and by Monthly Amount as of June 30, 2011

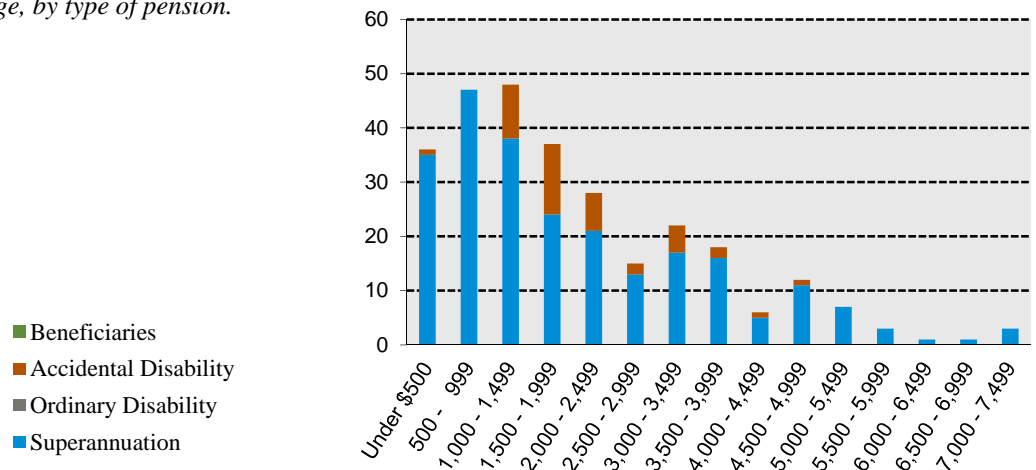
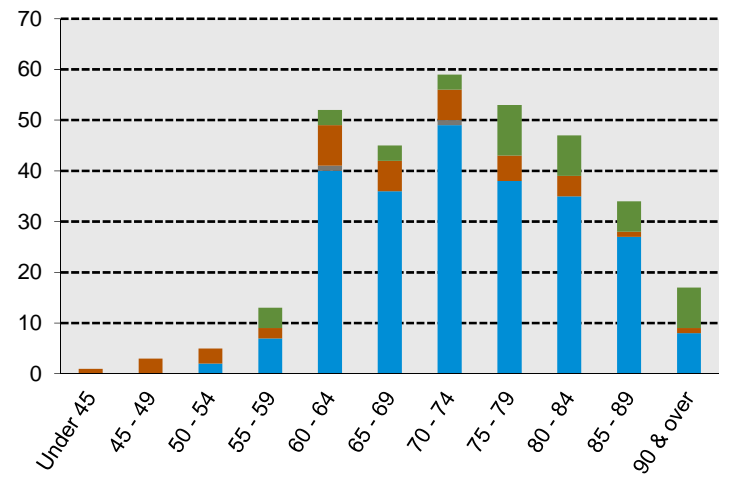


CHART 5
Distribution of Retired Participants and Beneficiaries by Type and by Age as of June 30, 2011



SECTION 2: Valuation Results for the Town of Reading Retirement System

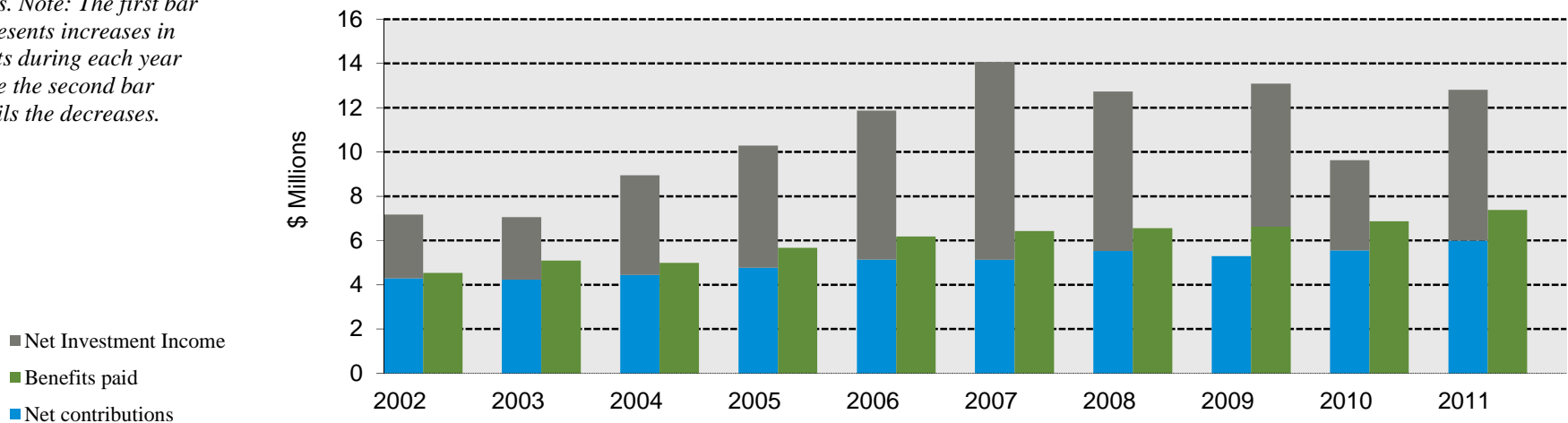
B. FINANCIAL INFORMATION

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 ten 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 June 30, 2002 – 2011



SECTION 2: Valuation Results for the Town of Reading 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 June 30,	
	2011	2010
1. Actuarial value of assets prior year	\$85,931,547	\$83,167,202
2. Contributions, less benefit payments and expenses during the year	-1,393,146	-1,315,064
3. Average actuarial value of assets: (1) + [50% of (2)]	85,234,974	82,509,670
4. Expected investment income: .0775 x (3)	6,605,711	6,394,499
5. Preliminary actuarial value of assets at the end of the year: (1) + (2) + (4)	91,144,112	88,246,637
6. Market value of assets at the end of the year	92,219,308	76,671,187
7. Adjustment toward market value: 20% of [(6) - (5)]	215,039	-2,315,090
8. Adjustment to be within 20% corridor	0	0
9. Final actuarial value of assets: (5) + (7) + (8)	<u>\$91,359,151</u>	<u>\$85,931,547</u>
10. Actuarial value as a percentage of market value: (9) ÷ (6)	99.1%	112.1%

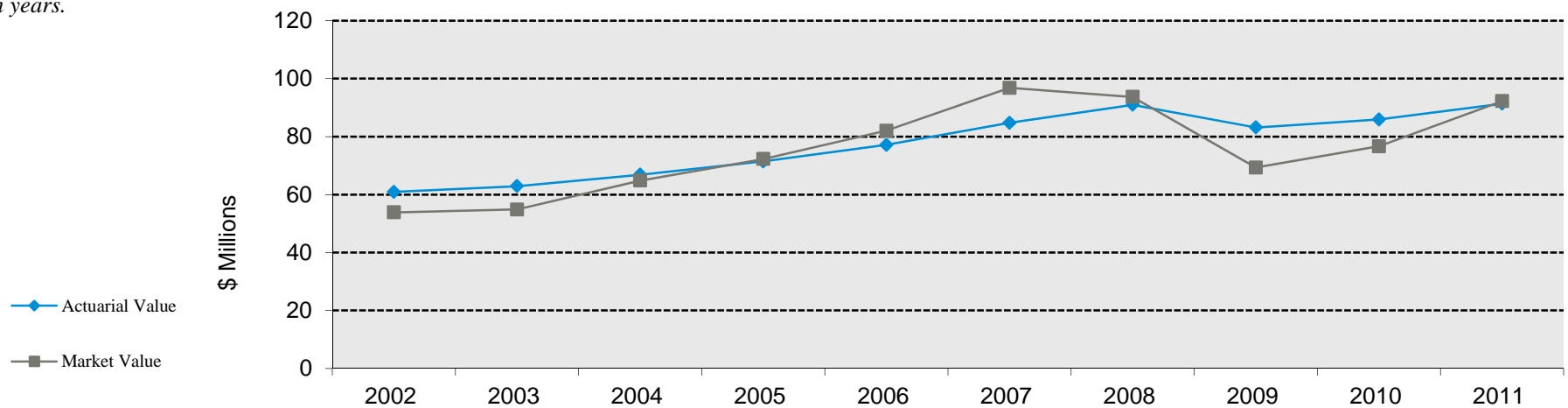
SECTION 2: Valuation Results for the Town of Reading Retirement System

Both the actuarial value and market value of assets are representations of the 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 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 ten years.

CHART 8

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 2002 – 2011



SECTION 2: Valuation Results for the Town of Reading 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 over the two-year period is \$1,116,609, 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 June 30, 2011

1. Net loss from investments*	-\$2,100,051
2. Net gain from administrative expenses	145
3. Net gain from other experience	<u>983,297</u>
4. Net experience loss: (1) + (2) + (3)	-\$1,116,609

* Details in Chart 10

SECTION 2: Valuation Results for the Town of Reading 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 System’s investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 7.75%. The actual rate of return on an actuarial basis for the 2011 plan year was 8.00% and 4.94% for the 2010 year.

Since the actual return for the two-year period was less than the assumed return, the System experienced an actuarial loss during the two-year period ending June 30, 2011 with regard to its investments.

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

**CHART 10
Actuarial Value Investment Experience**

	Year Ended	
	June 30, 2011	June 30, 2010
1. Actual return	\$6,820,750	\$4,079,409
2. Average value of assets	85,234,974	82,509,670
3. Actual rate of return: (1) ÷ (2)	8.00%	4.94%
4. Assumed rate of return	7.75%	7.75%
5. Expected return: (2) x (4)	\$6,605,711	\$6,394,499
6. Actuarial gain/(loss): (1) – (5)	<u>\$215,039</u>	<u>-\$2,315,090</u>

SECTION 2: Valuation Results for the Town of Reading 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 ten years, including five-year and ten-year averages.

Based upon this experience and future expectations, we have maintained the assumed rate of return of 7.75%.

CHART 11

Investment Return – Actuarial Value vs. Market Value: 2002 - 2011

Year Ended June 30	Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent
2002	\$2,881,438	4.95%	-\$3,991,714	-6.89%
2003	2,832,073	4.68	1,889,036	3.54
2004	4,501,226	7.19	10,498,167	19.23
2005	5,517,301	8.31	8,372,742	13.01
2006	6,726,376	9.48	10,817,413	15.07
2007	8,941,897	11.69	16,083,466	19.76
2008	7,207,644	8.55	-2,139,787	-2.22
2009	-6,464,400	-7.16	-23,031,823	-24.76
2010	4,079,409	4.94	8,680,249	12.64
2011	<u>6,820,750</u>	8.00	<u>16,941,268</u>	22.30
Total	\$43,043,714		\$44,119,017	
	Five-year average return	4.92%		3.98%
	Ten-year average return	5.84%		6.15%

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

SECTION 2: Valuation Results for the Town of Reading Retirement System

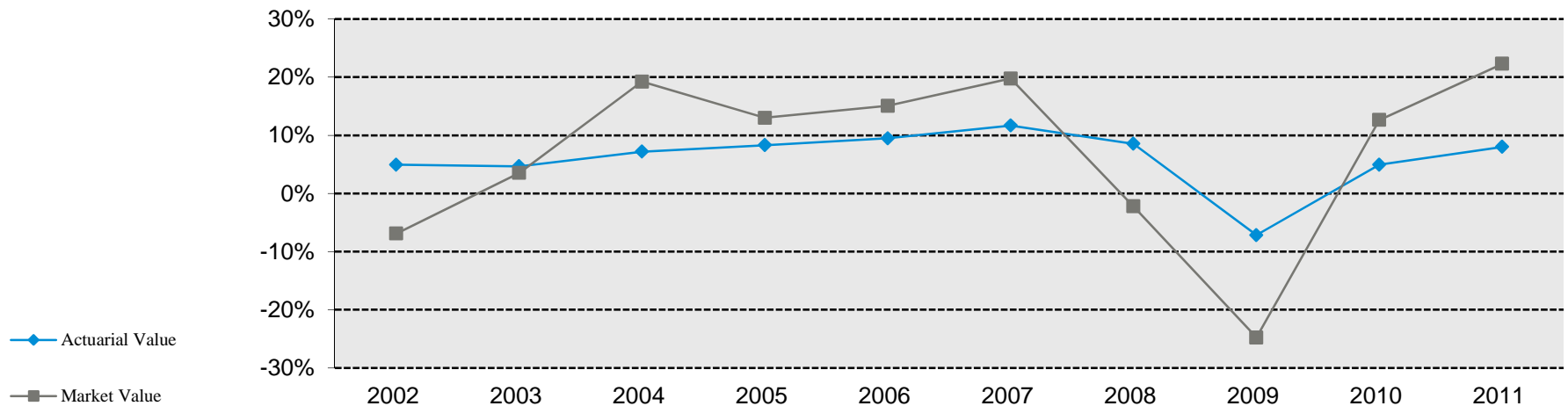
Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

Administrative Expenses

Administrative expenses for the years ended June 30, 2010 and 2011 were \$85,348 and \$70,774, respectively, compared to the assumption of \$75,000 for the year ended June 30, 2010 and \$78,375 for the year ended June 30, 2011. This resulted in a gain of \$145 for the two-year period. Based on budgeted expenses, we have revised the assumption to \$87,000 for the year beginning July 1, 2011.

This chart illustrates how this leveling effect has actually worked over the years 2002 - 2011.

CHART 12
Market and Actuarial Rates of Return for Years Ended June 30, 2002 - 2011



SECTION 2: Valuation Results for the Town of Reading 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 June 30, 2011 amounted to \$983,297, which is 0.7% of the actuarial accrued liability. The miscellaneous loss is primarily due to an investment loss on an actuarial basis of \$2.1 million over the two-year period, a \$2.0 million loss from newly disabled participants and employees transferring into the System with high service from other municipalities, and changes in assumptions described below, partially offset by a \$3.2 million gain from salary increases less than expected.

A brief summary of the demographic gain/(loss) experience of the Reading for the two-year period ending June 30, 2011 is shown in the chart below.

This valuation reflects the following assumption changes:

- The administrative expense assumption was increased from \$75,000 for the year beginning July 1, 2009 to \$87,000 for the year beginning July 1, 2011, based on the projected 2011 budget.
- The mortality table for healthy participants was changed from the RP-2000 Combined Healthy Mortality Table to the RP-2000 Employee Mortality Table projected 10 years with Scale AA for non-retired participants and the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA for retired participants.
- The mortality table for disabled participants was changed from the RP-2000 Combined Healthy Mortality Table set forward 5 years to the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA set forward 5 years.

Changing these assumptions resulted in a net increase in unfunded liability of \$2,280,878 and an increase in the employer normal cost of \$32,672.

CHART 13

Experience Gain/(Loss) Due to Changes in Demographics for Two-Year Period Ended June 30, 2011

1. Salary increases less than expected for continuing actives	\$3,220,343
2. Miscellaneous loss	<u>-2,237,046</u>
3. Total gain/(loss)	\$983,297

SECTION 2: Valuation Results for the Town of Reading 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.

We have determined the preliminary 2012 appropriation using a 19-year increasing (4.50% per year) amortization payment. Under this schedule, the System will be fully funded by June 30, 2030 assuming all assumptions are met. The prior funding schedule amortized the unfunded liability by June 30, 2028 with amortization payments that increased 4.50% per year.

Because the fiscal 2012 appropriation has already been budgeted at \$4,420,234, the results of this valuation will first be reflected in the fiscal 2013 appropriation of \$4,543,434 which represents an increase of 2.79%.

Exhibit F in Section 3 shows the recommended contributions through fiscal 2030 based on this funding schedule.

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

CHART 14
Recommended Contribution

	Year Beginning July 1			
	2011		2009	
	Amount	% of Payroll	Amount	% of Payroll
1. Total normal cost	\$3,154,661	15.07%	\$3,097,122	14.74%
2. Administrative expense assumption	87,000	0.42%	75,000	0.36%
3. Expected employee contributions	<u>-1,914,813</u>	<u>-9.15%</u>	<u>-1,872,838</u>	<u>-8.92%</u>
4. Employer normal cost: (1) + (2) + (3)	\$1,326,848	6.34%	\$1,299,284	6.18%
5. Actuarial accrued liability	134,440,050		121,918,447	
6. Actuarial value of assets	<u>91,359,151</u>		<u>83,167,202</u>	
7. Unfunded actuarial accrued liability: (5) - (6)	\$43,080,899		\$38,751,245	
8. Employer normal cost, adjusted for timing*	1,351,841	6.46%	1,323,757	6.30%
9. Payment on unfunded actuarial accrued liability, adjusted for timing	3,000,897	14.33%	2,699,305	12.85%
10. Preliminary recommended contribution: (8) + (9)	4,352,738	20.79%	\$4,023,062	19.15%
11. Budgeted appropriation	4,420,234	21.11%	3,686,795	17.55%
12. Projected payroll	20,934,376		21,004,628	

* Contributions are assumed to be paid on July 1 and December 31.

SECTION 2: Valuation Results for the Town of Reading 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 15 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 Standards. 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.

Although the GASB requires that the actuarial value of assets be used to determine the funded ratio, Chart 16 shows the funded ratio calculated using both the actuarial value of assets (67.96%) and the market value of assets (68.60%).

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 15
Required Versus Actual Contributions

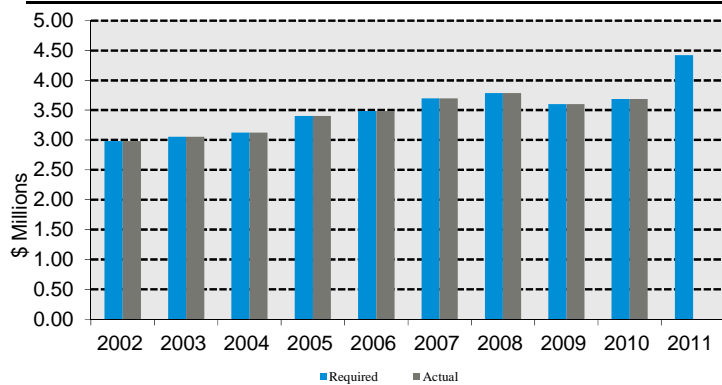
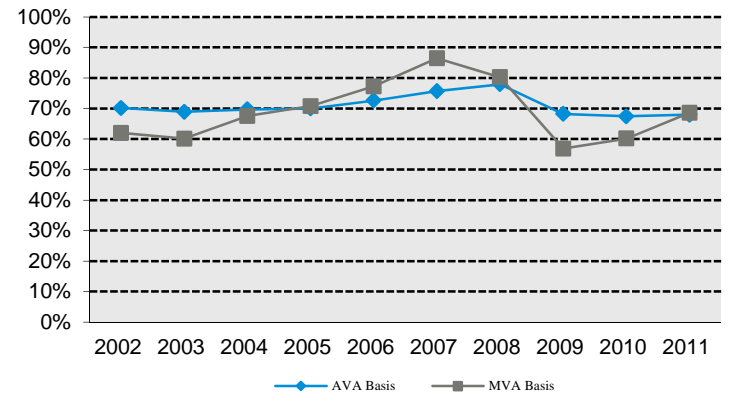


CHART 16
Funded Ratio



SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT A

Table of Plan Coverage

Category	Year Ended June 30		Change From Prior Valuation
	2011	2009	
Active participants in valuation:			
Number	333	356	-6.5%
Average age	48.6	48.2	N/A
Average years of service	15.0	14.4	N/A
Total payroll	\$19,937,502	\$20,004,408	-0.3%
Average payroll	59,872	56,192	6.5%
Member contributions	20,711,504	19,383,852	6.8%
Inactive participants with a vested right to a deferred or immediate benefit	10	9	11.1%
Inactive participants entitled to a return of their contributions	19	19	N/A
Retired participants:			
Number in pay status	242	232	4.3%
Average age	73.6	72.9	N/A
Average monthly benefit	\$2,029	\$1,852	9.6%
Disabled participants:			
Number in pay status	42	42	N/A
Average age	67.0	66.9	N/A
Average monthly benefit	\$2,147	\$1,974	8.8%
Beneficiaries in pay status	45	43	4.7%

SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT B

**Participants in Active Service as of June 30, 2011
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	3	3	--	--	--	--	--	--	--	--
	\$40,327	\$40,327	--	--	--	--	--	--	--	--
25 - 29	23	19	4	--	--	--	--	--	--	--
	\$53,415	\$51,389	\$63,041	--	--	--	--	--	--	--
30 - 34	24	5	14	5	--	--	--	--	--	--
	\$58,282	\$62,501	\$57,027	\$57,580	--	--	--	--	--	--
35 - 39	31	5	13	9	4	--	--	--	--	--
	\$60,362	\$42,974	\$60,520	\$69,976	\$59,949	--	--	--	--	--
40 - 44	36	6	7	10	4	9	--	--	--	--
	\$61,296	\$52,758	\$72,003	\$56,279	\$67,778	\$61,353	--	--	--	--
45 - 49	48	6	10	8	5	13	6	--	--	--
	\$62,526	\$45,569	\$62,199	\$48,562	\$75,850	\$70,301	\$70,698	--	--	--
50 - 54	66	15	7	6	6	9	15	7	1	--
	\$67,615	\$49,322	\$63,327	\$70,311	\$53,022	\$86,791	\$77,542	\$75,995	\$63,235	--
55 - 59	52	4	6	12	4	7	5	5	9	--
	\$57,180	\$33,730	\$40,203	\$44,889	\$60,978	\$70,671	\$81,046	\$56,296	\$70,360	--
60 - 64	36	3	3	5	4	10	5	3	2	1
	\$55,762	\$51,435	\$43,140	\$50,241	\$55,806	\$58,239	\$47,741	\$70,906	\$74,592	\$66,304
65 - 69	12	--	--	7	--	3	1	--	1	--
	\$50,818	--	--	\$56,007	--	\$47,276	\$18,557	--	\$57,387	--
70 & over	2	--	--	1	--	1	--	--	--	--
	\$28,459	--	--	\$39,791	--	\$17,126	--	--	--	--
Total	333	66	64	63	27	52	32	15	13	1
	\$59,872	\$49,148	\$59,019	\$55,755	\$62,053	\$66,985	\$70,307	\$68,410	\$69,465	\$66,304

SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT C

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2011	Year Ended June 30, 2010
Contribution income:		
Employer contributions	\$4,229,887	\$3,686,795
Employee contributions	1,741,617	1,914,517
Other contributions	92,759	34,050
Less administrative expenses	<u>-70,779</u>	<u>-85,348</u>
Net contribution income	\$5,993,484	\$5,550,014
Net investment income	<u>6,820,750</u>	<u>4,079,409</u>
Total income available for benefits	\$12,814,234	\$9,629,423
Less benefit payments:		
Pensions	-\$7,441,468	-\$6,901,119
Net 3(8)(c) reimbursements	-130,374	-113,797
Refunds, annuities, and Option B refunds	-29,610	-64,797
State reimbursements	<u>214,822</u>	<u>214,635</u>
Net benefit payments	-\$7,386,630	-\$6,865,078
Change in reserve for future benefits	\$5,427,604	\$2,764,345

SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT D

Development of the Fund Through June 30, 2011

Year Ended June 30	Employer Contributions	Employee Contributions	Other Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2002	\$2,980,400	\$1,342,269	\$22,592	\$2,881,438	\$46,571	\$4,533,216	\$60,933,080
2003	3,051,200	1,156,951	57,100	2,832,073	41,581	5,092,173	62,896,650
2004	3,124,800	1,352,787	23,320	4,501,226	55,251	4,993,358	66,850,174
2005	3,405,725	1,378,995	37,638	5,517,301	50,278	5,671,432	71,468,123
2006	3,488,686	1,674,736	32,402	6,726,376	57,024	6,182,022	77,151,277
2007	3,696,695	1,430,457	39,870	8,941,897	42,640	6,433,836	84,783,719
2008	3,785,501	1,755,806	49,460	7,207,644	62,783	6,551,212	90,968,135
2009	3,600,826	1,716,786	41,054	-6,464,400	67,391	6,627,808	83,167,202
2010	3,686,795	1,914,517	34,050	4,079,409	85,348	6,865,078	85,931,547
2011	4,229,889	1,741,617	92,759	6,820,750	70,779	7,386,630	91,359,151

* Net of investment expenses.

SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT E

Development of Unfunded Actuarial Accrued Liability

	Year Ended	
	June 30, 2011	June 30, 2010
1. Unfunded actuarial accrued liability at beginning of year	\$39,339,591	\$38,751,245
2. Normal cost at beginning of year	3,314,867	3,172,122
3. Total contributions	-6,064,263	-5,635,362
4. Interest		
(a) For whole year on (1) + (2)	\$3,305,720	\$3,249,061
(b) For half year on (3)	<u>-212,503</u>	<u>-197,475</u>
(c) Total interest	<u>3,093,217</u>	<u>3,051,586</u>
5. Expected unfunded actuarial accrued liability	\$39,683,412	\$39,339,591
6. Changes due to:		
(a) Investment loss	\$2,100,051	--
(b) Net gain from other experience	-983,442	
(c) Assumption changes	<u>2,280,878</u>	--
(d) Total changes	<u>3,397,487</u>	--
7. Unfunded actuarial accrued liability at end of year	<u>\$43,080,899</u>	--

SECTION 3: Supplemental Information for the Town of Reading Retirement System

**EXHIBIT F
Funding Schedule**

(1) Fiscal Year Ended June 30	(2) Employer Normal Cost	(3) Amortization of Remaining Unfunded Liability	(4) Total Plan Cost: (2) + (3)	(5) Total Unfunded Actuarial Accrued Liability at Beginning of Fiscal Year	(6) Percentage Increase in Total Cost
2012	\$1,351,841	\$3,068,393	\$4,420,234	\$43,080,899	- -
2013	1,412,673	3,130,761	4,543,434	43,174,599	2.79%
2014	1,476,243	3,271,646	4,747,889	43,209,602	4.50%
2015	1,542,674	3,418,870	4,961,544	43,098,321	4.50%
2016	1,612,094	3,572,719	5,184,813	42,822,715	4.50%
2017	1,684,638	3,733,491	5,418,129	42,363,042	4.50%
2018	1,760,447	3,901,498	5,661,945	41,697,715	4.50%
2019	1,839,667	4,077,066	5,916,733	40,803,144	4.50%
2020	1,922,452	4,260,534	6,182,986	39,653,567	4.50%
2021	2,008,962	4,452,258	6,461,220	38,220,866	4.50%
2022	2,099,365	4,652,610	6,751,975	36,474,367	4.50%
2023	2,193,836	4,861,978	7,055,814	34,380,626	4.50%
2024	2,292,559	5,080,766	7,373,325	31,903,198	4.50%
2025	2,395,724	5,309,401	7,705,125	29,002,382	4.50%
2026	2,503,532	5,548,325	8,051,857	25,634,953	4.50%
2027	2,616,191	5,798,000	8,414,191	21,753,868	4.50%
2028	2,733,920	6,058,909	8,792,829	17,307,948	4.50%
2029	2,856,946	6,331,560	9,188,506	12,241,537	4.50%
2030	2,985,509	6,616,480	9,601,989	6,494,129	4.50%
2031	3,119,857	-	3,119,857	-	-67.51%

Notes: Recommended contributions are assumed to be paid on July 1 and December 31.

Item (2) is assumed to increase 4.5% per year.

Item (3) is calculated to increase 4.5% per year.

Fiscal 2012 appropriation is previously determined budgeted amount.

SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT G

Department Results

	Storm Water Management	Housing	Municipal Light	School	Sewer	Water	All Other	Total
1) Total normal cost	\$8,121 10.60%	\$33,540 14.59%	\$917,641 16.15%	\$357,504 14.37%	\$18,454 9.34%	\$50,453 8.94%	\$1,768,948 15.12%	\$3,154,661 15.07%
2) Administrative expense allowance	224 0.29%	925 0.40%	25,307 0.45%	9,859 0.40%	509 0.26%	1,391 0.25%	48,784 0.42%	87,000 0.42%
3) Expected employee contributions	-7,230 -9.43%	-22,176 -9.65%	-515,399 -9.07%	-228,236 -9.17%	-18,333 -9.28%	-42,087 -7.46%	-1,081,351 -9.24%	-1,914,812 -9.15%
4) Employer normal cost: (1) + (2) + (3), adjusted for timing	\$1,136 1.48%	\$12,520 5.45%	\$435,602 7.67%	\$141,748 5.70%	\$642 0.32%	\$9,941 1.76%	\$750,252 6.41%	\$1,351,842 6.46%
5) Total actuarial accrued liability	38,212	994,486	41,692,837	14,350,360	1,056,068	4,035,778	72,272,309	\$134,440,050
6) Assets at actuarial value	25,369	806,426	30,149,299	9,145,757	693,875	3,215,180	47,323,245	91,359,151
7) Unfunded actuarial accrued liability: (5) - (6)	12,843	188,060	11,543,538	5,204,603	362,193	820,598	24,949,064	43,080,899
8) Payment on unfunded actuarial accrued liability*	-251 -0.33%	11,402 4.96%	900,634 15.85%	368,059 14.79%	22,633 11.46%	17,986 3.19%	1,747,927 14.94%	3,068,389 14.66%
9) Total employer cost with interest for fiscal 2012	885 1.15%	23,922 10.40%	1,336,236 23.52%	509,807 20.49%	23,275 11.79%	27,927 4.95%	2,498,179 21.36%	4,420,231 21.11%
10) Projected payroll	76,640	229,919	5,680,636	2,488,140	197,495	564,293	11,697,255	20,934,378
11) Total employer cost for fiscal 2013	2,210 2.76%	26,903 11.20%	1,288,076 21.70%	526,556 20.25%	27,234 13.20%	73,126 12.40%	2,599,329 21.26%	4,543,434 20.77%
12) Total employer cost for fiscal 2014	2,309 2.76%	28,114 11.20%	1,346,039 21.70%	550,251 20.25%	28,460 13.20%	76,417 12.40%	2,716,299 21.26%	4,747,889 20.77%

* Amortization payment equals fiscal 2012 budgeted appropriation less employer normal cost.

SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT G

Department Results (continued)

	Storm Water Management	Housing	Municipal Light	School	Sewer	Water	All Other
Active employees							
Number	2	4	70	57	5	10	185
Average annual salary	\$38,320	\$57,480	\$81,152	\$43,652	\$39,499	\$56,429	\$63,228
Average age	39.00	53.75	49.94	55.18	37.20	49.50	46.24
Average years of service	4.75	8.60	17.65	12.97	7.97	23.08	14.65
Inactive vested members	0	1	0	1	1	0	7
Inactive non-vested members	0	0	4	1	0	0	14
Retired members	0	4	64	93	3	6	159
Total members	2	9	138	152	9	16	365

SECTION 3: Supplemental Information for the Town of Reading Retirement System

EXHIBIT H

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 Town of Reading 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 Town of Reading 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 45 beneficiaries in pay)	329
2. Inactive participants with a right to a return of their contributions	19
3. Inactive participants with a vested right to a deferred or immediate benefit as of June 30, 2011	10
4. Participants active during year ended June 30, 2011 with total accumulated contributions of \$20,711,504 and total projected payroll of \$20,934,376	333

The actuarial factors as of July 1, 2011 are as follows:

1. Normal cost	\$3,154,661
2. Administrative expense assumption	87,000
3. Expected employee contributions	<u>-1,914,813</u>
4. Employer normal cost: (1) + (2) + (3)	\$1,326,848
5. Actuarial accrued liability	134,440,050
Retired participants and beneficiaries	\$70,534,050
Active participants	62,705,752
Inactive participants	<u>1,200,248</u>
6. Actuarial value of assets (\$92,219,308 at market value)	91,359,151
7. Unfunded actuarial accrued liability: (5) – (6)	43,080,899

The determination of the recommended contribution is as follows:

1. Employer normal cost, adjusted for timing	\$1,351,841
2. Payment on unfunded actuarial accrued liability, adjusted for timing	3,000,897
3. Preliminary recommended contribution: (1) + (2)	4,352,738
4. Budgeted appropriation based on July 1, 2009 actuarial valuation	4,420,234
5. Projected payroll	20,934,376

Note: Contributions are assumed to be paid on July 1 and December 31.

SECTION 4: Reporting Information for the Town of Reading Retirement System

EXHIBIT II

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Plan Year Ended June 30	Annual Required Contributions	Actual Contributions	Percentage Contributed
2002	\$2,980,400	\$2,980,400	100.0%
2003	3,051,200	3,051,200	100.0%
2004	3,124,800	3,124,800	100.0%
2005	3,405,725	3,405,725	100.0%
2006	3,488,686	3,488,686	100.0%
2007	3,696,695	3,696,695	100.0%
2008	3,785,501	3,785,501	100.0%
2009	3,600,826	3,600,826	100.0%
2010	3,686,795	3,686,795	100.0%
2011	4,229,889	4,229,889	100.0%

SECTION 4: Reporting Information for the Town of Reading 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)
07/01/2002*	\$60,933,080	\$86,888,108	\$25,955,028	70.13%	\$16,854,968	153.99%
07/01/2003	62,896,650	91,301,520	28,404,870	68.89%	16,734,364	169.74%
07/01/2004*	66,580,174	95,961,256	29,111,082	69.38%	17,487,410	166.47%
07/01/2005	71,468,123	102,152,866	30,684,743	69.96%	18,047,705	170.02%
07/01/2006*	77,151,279	106,238,442	29,087,163	72.62%	18,859,852	154.23%
07/01/2007	84,783,719	112,011,696	27,227,977	75.69%	19,312,631	140.99%
07/01/2008*	90,968,135	116,726,918	25,788,783	77.93%	20,181,699	127.63%
07/01/2009	83,167,202	121,918,447	38,751,245	68.22%	21,004,628	184.49%
07/01/2010*	85,931,546	127,407,021	41,475,475	67.45%	21,949,836	188.96%
07/01/2011	91,359,151	134,440,050	43,080,899	67.96%	20,934,376	205.79%

* Liabilities and payroll estimated from prior year's valuation.

SECTION 4: Reporting Information for the Town of Reading Retirement System

EXHIBIT IV

Supplementary Information Required by the GASB

Valuation date	July 1, 2011
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Payments calculated to increase at 4.5% per year
Remaining amortization period	19 years remaining as of July 1, 2011
Asset valuation method	Sum of actuarial value at beginning of year, contributions and investment earnings based on the actuarial interest assumption less benefit payments plus 20% of market value at end of year in excess of that sum, plus additional adjustment toward market value as necessary so that final actuarial value is within 20% of market value.

Actuarial assumptions:

Investment rate of return	7.75%
Inflation rate	4.50%
Projected salary increases	Based on years of service, ranging from 7.00% decreasing to 4.75% after 9 years of service for Group 1 employees, and ranging from 8.00% decreasing to 5.25% after 8 years for Group 4 employees.
Cost of living adjustments	3.00% of the first \$12,000 of retirement income

Plan membership:

Retired participants and beneficiaries receiving benefits	329
Inactive participants entitled to a return of their employee contributions	19
Inactive participants with a vested right to a deferred or immediate benefit	10
Active participants	<u>333</u>
Total	691

SECTION 4: Reporting Information for the Town of Reading Retirement System

EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy:

Pre-Retirement: RP-2000 Employees Mortality Table projected 10 years with Scale AA (previously, RP-2000 Combined Healthy Mortality Table)

Post-Retirement: RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA (previously, RP-2000 Combined Healthy Mortality Table)

Disabled: RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA set forward 5 years (Previously, RP-2000 Combined Healthy Mortality Table set forward 5 years)

These mortality tables reasonably reflect the projected mortality experience of the Plan as of the measurement date. The additional projection of 10 years is a provision made for future mortality improvement.

Termination Rates before Retirement:

Age	Group 1 - Rate (%)		
	Mortality		Disability
	Male	Female	
20	0.03	0.02	0.01
25	0.03	0.02	0.02
30	0.04	0.02	0.03
35	0.07	0.04	0.06
40	0.10	0.06	0.10
45	0.13	0.10	0.15
50	0.18	0.14	0.19
55	0.25	0.23	0.24
60	0.42	0.37	0.28

Notes: 55% of the disability rates shown represent accidental disability.
 40% 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 Town of Reading Retirement System

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

*Notes: 90% of the disability rates shown represent accidental disability.
 40% 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 (%)	
	Group 1	Group 4
0	15.0	1.5
1	12.0	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 Town of Reading Retirement System

Retirement Rates:

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

- 2011 Salary:** Annualized salary reported in the data.
- Total Service:** Total creditable service reported in the data.
- Unknown Data for Participants:** Same as those exhibited by participants with similar known characteristics.
- Age of Spouse:** Females are 3 years younger than their spouses.

SECTION 4: Reporting Information for the Town of Reading Retirement System

Percent Married: 75%

Net Investment Return: 7.75%

Salary Increases:

Years of Service	Group 1	Group 4
0	7.00%	8.00%
1	6.50%	7.50%
2	6.50%	7.00%
3	6.00%	6.50%
4	6.00%	6.00%
5	5.50%	6.00%
6	5.50%	5.50%
7	5.00%	5.50%
8	5.00%	5.25%
9 and later	4.75%	5.25%

Administrative Expenses: \$87,000 for 2011 (previously, \$75,000).

Actuarial Value of Assets: Sum of actuarial value at beginning of year, contributions and investment earnings based on the actuarial interest assumption less benefit payments plus 20% of market value at end of year in excess of that sum, plus additional adjustment toward market value as necessary so that final actuarial value is within 20% of 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.

SECTION 4: Reporting Information for the Town of Reading Retirement System

Changes in Assumptions:

Based on past experience and future expectations, the following actuarial assumption were changed:

- The administrative expense assumption was increased from \$75,000 for the year beginning July 1, 2009 to \$87,000 for the year beginning July 1, 2011, based on the projected 2011 budget.
- The mortality table for healthy participants was changed from the RP-2000 Combined Healthy Mortality Table to the RP-2000 Employee Mortality Table projected 10 years with Scale AA for non-retired participants and the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA for retired participants.
- The mortality table for disabled participants was changed from the RP-2000 Combined Healthy Mortality Table set forward 5 years to the RP-2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA set forward 5 years.

SECTION 4: Reporting Information for the Town of Reading 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

SECTION 4: Reporting Information for the Town of Reading Retirement System

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. 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 \$15 per year of creditable service, not exceeding \$300. The veteran allowance is paid in addition to the 80 percent maximum.

Employee Contributions

<u>Date of Hire</u>	<u>Contribution Rate</u>
Prior to January 1, 1975	5%
January 1, 1975 – December 31, 1983	7%
January 1, 1984 – June 30, 1996	8%
July 1, 1996 onward	9%

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).

SECTION 4: Reporting Information for the Town of Reading Retirement 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/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, 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/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/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.

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 death, a spouse's benefit will be paid equal to the amount the employee would have received under Option C. 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 \$250 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.

SECTION 4: Reporting Information for the Town of Reading Retirement System

"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 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 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

The Town of Reading Retirement System has elected to increase the Section 101 supplemental annual allowance from \$6,000 per year to \$9,000 per year.