Franklin Regional Retirement System

Actuarial Valuation
January 1, 2010

STONE
CONSULTING, INC.

December 2010

December 9, 2010

Franklin Regional Retirement Board
278 Main Street, Suite 311
Greenfield, MA 01301

Dear Franklin Regional Retirement Board:

Stone Consulting, Inc. has performed a January 1, 2010 actuarial valuation of the Franklin Regional Retirement System. This valuation and report was prepared using generally accepted actuarial principles and practices and meets the parameters set by the Governmental Accounting Standards Board Statement (GASB) No. 25. To the best of our knowledge, this report is complete and accurate, and the assumptions used represent our best estimate of anticipated experience of the system.

As part of performing the valuation, Stone Consulting, Inc. was furnished member data by the Franklin Regional Retirement System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary. In addition, the administrative staff furnished financial statements that were not audited by the actuary or by the plan's auditors.

The funding objective of the plan is to fully fund the system while attempting to maintain a stable contribution amount for the upcoming fiscal year that is consistent with prior funding schedules or if employer finances allow it, to increase the contribution amount. This funding objective is being met.

We anticipate over time the contribution level to decrease as a percentage of payroll. The contribution rate is determined by adding the normal cost plus an amortization of the unfunded actuarial accrued liability. The normal cost is expected to remain at a level percentage of payroll. The number of years of the amortization and/or the rate of increase of the amortization is adjusted to maintain a stable contribution level for the upcoming fiscal year. The length of the funding schedule contained in this actuarial valuation report is nineteen years (fully funded by 2030) and the amortization increase is 4.26% amortization. The amortization increase cannot exceed 4.50% annually. The maximum length of the amortization is until Fiscal 2030. These limits are contained in Chapter 32 of the Massachusetts General Laws. Note that Section 22F of Chapter 32 was recently passed by the legislature. This section allows Systems up to Fiscal 2040 to become fully funded, it also restricts the amortization increase to 4% as well as other restrictions. The Franklin Regional Retirement Board has not availed itself of Section 22F as of now.

The contribution amount for Fiscal Year 2012 is $5,093,076 that is practically the same as the anticipated contribution amount from the prior funding schedule. PERAC and GASB guidelines indicate that actuarial valuations should be conducted at least every other year. The Franklin Regional Retirement Board conducted their previous actuarial valuation effective January 1, 2008. This satisfies these guidelines.

The Franklin Regional Retirement Board has elected to increase the Cost-of-living base from $12,000 to $13,000. This is reflected in this valuation. It increased the unfunded actuarial accrued liability by approximately $740,000.

We are pleased to present the results of this valuation. If the Retirement Board has any questions on the content of this report, we would be glad to respond. Please note that this report is meant to be used in its entirety. Use of excerpts of this report may result in inaccurate or misleading understanding of the results.

Respectfully submitted,
STONE CONSULTING, INC.
Actuaries for the Plan

Lawrence B. Stone
Member, American Academy of Actuaries

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INTRODUCTION

This report presents the results of the actuarial valuation of the Franklin Regional Retirement System. The valuation was performed at the request of the Retirement Board as of January 1, 2010 for the purpose of determining the contribution requirements for Fiscal Year 2012 and beyond. The contribution requirements are based on:

- The financial condition of the system as of December 31, 2009
- The benefit provisions of M.G.L. Chapter 32 and related statutes;
- The demographics of members in the system (i.e., active and inactive participants, retirees and beneficiaries as of January 1, 2010);
- Economic assumptions regarding salary increases and investment earnings; and
- Other actuarial assumptions (i.e., withdrawals, retirement, death, etc.)

JANUARY 1, 2010 VALUATION SUMMARY

	January 1, 2010	January 1, 2008	Change
Contribution Fiscal 2012	$5,093,076	$5,093,062	$14
Funding Schedule Length	19 years	15 years	4 years
Amortization Increase	4.26%	2.38%	1.88%
Funding Ratio	67%	73%	-7%
Interest Rate Assumption	7.875%	8.00%	-0.125%
Salary Increase Rate Assumption	4.25%	4.75%	-0.50%

- The Fiscal Year 2012 contribution is about the same as the planned 2012 contribution. The System experienced a $22.7 million net investment loss from the expected market value return since January 1, 2008 (the prior valuation date). Stone Consulting, with agreement from the Retirement Board, values assets using an asset smoothing technique. In this approach, asset gains and losses are recognized over a four-year period with a requirement that the actuarial value of assets be within 10% of the market value of assets. The purpose of this approach is to avoid wide swings in asset value from one valuation to the next. This valuation recognizes $12.7 million of the actuarial asset loss leaving $10.0 million unrecognized. The unrecognized gain will be reflected in future valuations. There is also a $429,773 unrecognized gain from the 2007 year which will be fully recognized in future valuations.

The System experienced a -1.0% average return on the actuarial value of assets versus our assumption of an 8.00% return. The market value of assets experienced an average return of -7.59%. The System's asset portfolio, effective December 31, 2009 was approximately 71% equities, alternative investments and real estate and 29% fixed income and short-term investments. The interest rate assumption was changed to 7.875% from 8.00% to reflect anticipated market performance.

- We have changed the salary increase rate to 4.25% from 4.75% used in the 2008 actuarial valuation to reflect anticipated experience. Total compensation changed by -2.8% over the prior valuation (two years), average annual compensation (compensation divided by number of active members) changed by 23.1%, (11.0% per year). The increase in average annual compensation is primarily due to excluding employees earning less than $5,000. There were 139 employees earning less than $5,000 who were included in the January 1, 2008 valuation. The number of active members has decreased while the average age and service has increased.

- The funding level of the Franklin Regional Retirement System is 67% (61% using market value of assets), compared to 73% for the January 1, 2008 actuarial valuation. Chapter 68 requires a minimum funding ratio of 65% along with additional criteria in order to avoid being labeled an "under performing system". If you are considered an "under performing system" the system's assets are required to be transferred to PRIT. The funding level is estimated to be in the second quartile of Massachusetts' Contributory Retirement Systems.

The schedule length is nineteen (19) years. The schedule's length is four years more than the remainder of the funding schedule from the prior valuation and represents the maximum permitted under Chapter 32 of the Massachusetts General Laws without using Section 22F. The amortization percentage was changed from 2.38% to 4.26%, while maintaining a FY2012 contribution level consistent with the prior valuation. The maximum amortization permitted under Chapter 32 is 4.50%, again without regards to Section 22F. There are two small early retirement incentive bases that are being amortized over ten (8) and (9) remaining years with a level amortization payment.

- Non-economic assumptions have been changed since the 2008 valuation. The mortality assumption was changed to the RP2000 mortality table projected 10 years with Scale AA, (previously no projection was used) and the retirement age was extended to 70 for Groups 1 and 2. These changes decreased the accrued liability by over $560,000.

- Economic assumptions have been changed also. The interest rate was changed to 7.875% from 8.00% and the salary scale assumption was changed to 4.25% from 4.75%. This increased the accrued liability by approximately $180,000.

- The Cola base was increased from $12,000 to $13,000. This increased the accrued liability by about $739,000.

JANUARY 1, 2010 ACTUARIAL VALUATION RESULTS

	January 1, 2010	January 1, 2008	Percentage Change
Funding			
• Contribution for Fiscal 2012	$5,093,076		
• Contribution for Fiscal 2012 based on current schedule		$5,093,062	0.0%
Members *			
• ***Actives***			
a. Number	969	1,227	-21.0%
b. Annual Compensation	$29,457,390	$30,302,151	-2.8%
c. Average Annual Compensation	$30,400	$24,696	23.1%
d. Average Attained Age	48.1	47.7	0.8%
e. Average Past Service	10.1	9.3	8.6%
• ***Retired, Disabled and Beneficiaries***			
a. Number	442	404	9.4%
b. Total Benefits*	$5,352,265	$4,368,496	22.5%
c. Average Benefits*	$12,109	$10,813	22.5%
d. Average Age	71.9	71.8	0.1%
• ***Inactives***			
a. Number	637	631	1.0%
Normal Cost			
a. Total Normal Cost as of January 1, 2010	$3,701,044	$3,896,597	-5.0%
b. Less Expected Members' Contributions	2,531,686	2,565,686	-1.3%
c. Normal Cost to be funded by the Units	$1,169,358	$1,330,911	-12.1%
d. Adjustment to July 1, 2011	75,333	95,945	-21.5%
e. Administrative Expense Assumption	433,736	439,764	-1.4%
f. Normal Cost Adjusted to July 1, 2011	$1,678,427	$1,866,620	-10.1%

*Excluding State reimbursed COLA

SUMMARY OF JANUARY 1, 2010 VALUATION
(Continued)

	January 1, 2010	January 1, 2008	Percentage Change
Actuarial Accrued Liability as of January 1, 2010			
a. Active Members	$62,901,777	$62,190,942	1.1%
b. Inactive Members	4,033,816	2,278,893	77.0%
c. Retired Members and Beneficiaries	52,413,657	41,502,482	26.3%
d. Total	$119,349,250	$105,972,317	12.6%
Unfunded Actuarial Accrued Liability			
a. Actuarial Accrued Liability as of January 1, 2010	$119,349,250	$105,972,317	12.6%
b. Less Actuarial Value of Assets as of January 1, 2010	79,458,638	77,859,319	2.1%
c. Unfunded Actuarial Accrued Liability as of January 1, 2010	$39,890,612	$28,112,998	41.9%
d. Adjustment to July 1, 2011	$ 2,006,396	$1,039,416	
e. Unfunded Actuarial Accrued Liability as of July 1, 2011	$41,897,008	$29,152,414	

DEMOGRAPHIC INFORMATION

Members	January 1, 2010	Percentage Change
• ***Actives***		
a. Number	969	-21.0%
b. Annual Compensation	$29,457,390	-2.8%
c. Average Annual Compensation	$30,400	23.1%
d. Average Attained Age	48.1	0.8%
e. Average Past Service	10.1	8.6%
• ***Retired, Disabled and Beneficiaries***		
a. Number	442	9.4%
b. Total Annual Retirement Allowance excluding State-reimbursed COLA	$5,352,265	22.5%
• ***Inactives***		
a. Number	637	1.0%

- The data was supplied by the Franklin Regional Retirement Board. The data was checked under broad parameters of reasonableness. With the assistance of the staff of the Franklin Regional Retirement Board, we were able to develop a database sufficient for valuation purposes.

- Payroll changed by -2.8% over the course of the past two years. Average annual compensation changed by 23.1% over the same time period. This was mainly due to the exclusion of previous members who earned under $5,000 per year.

- The salary increase assumption includes general wage adjustments, step increases, and promotional increases.

HISTORY OF ACTIVE PARTICIPANTS

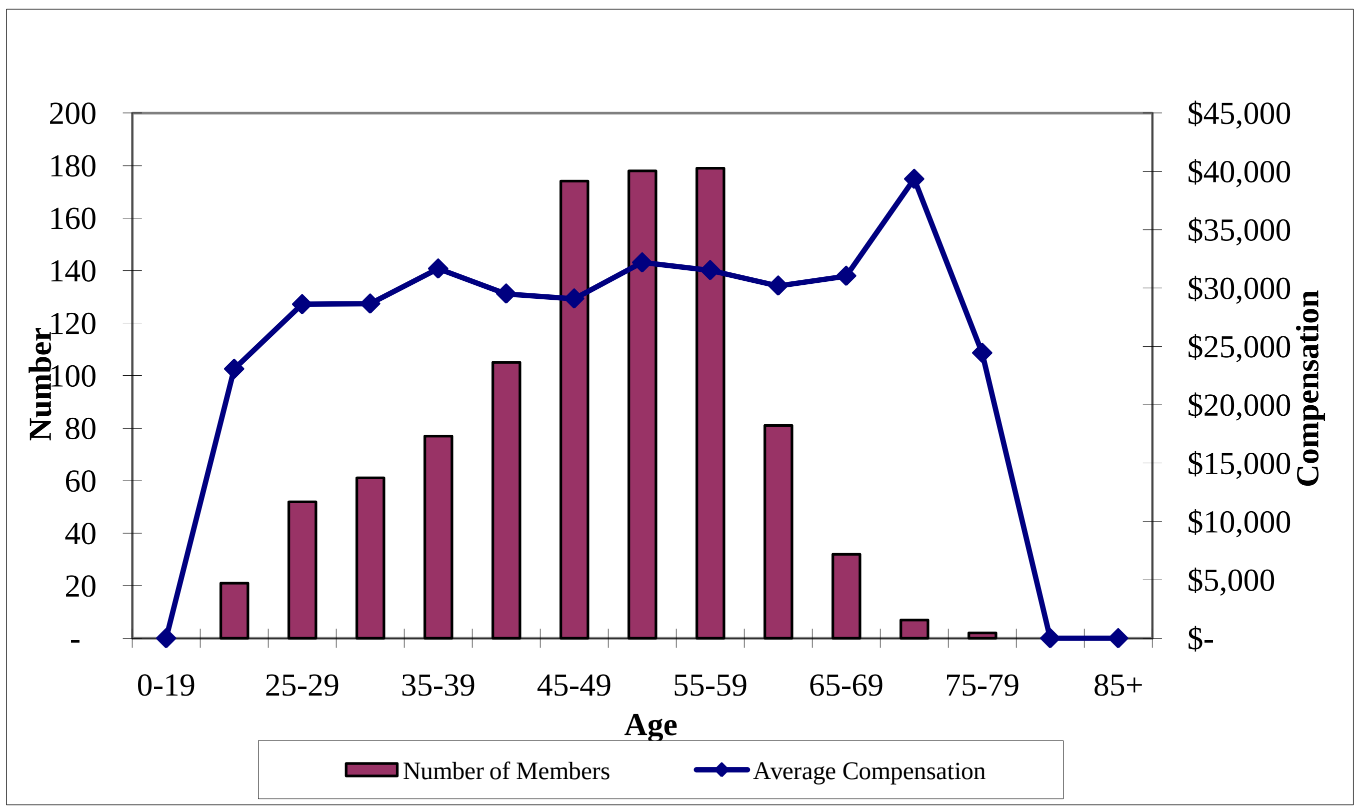
Valuation Year	Number	Average Age	Average Past Service	Average Ann'l Compensation
2010	969	48.1	10.1	$30,400
2008	1,227	47.7	9.3	$24,696
2006	1,131	47.5	9.1	$23,191
2003	1,155	46.1	7.4	$17,923
2001	1,222	45.7	10.8	$36,945
1999	1,163	45.5	7.2	$15,806

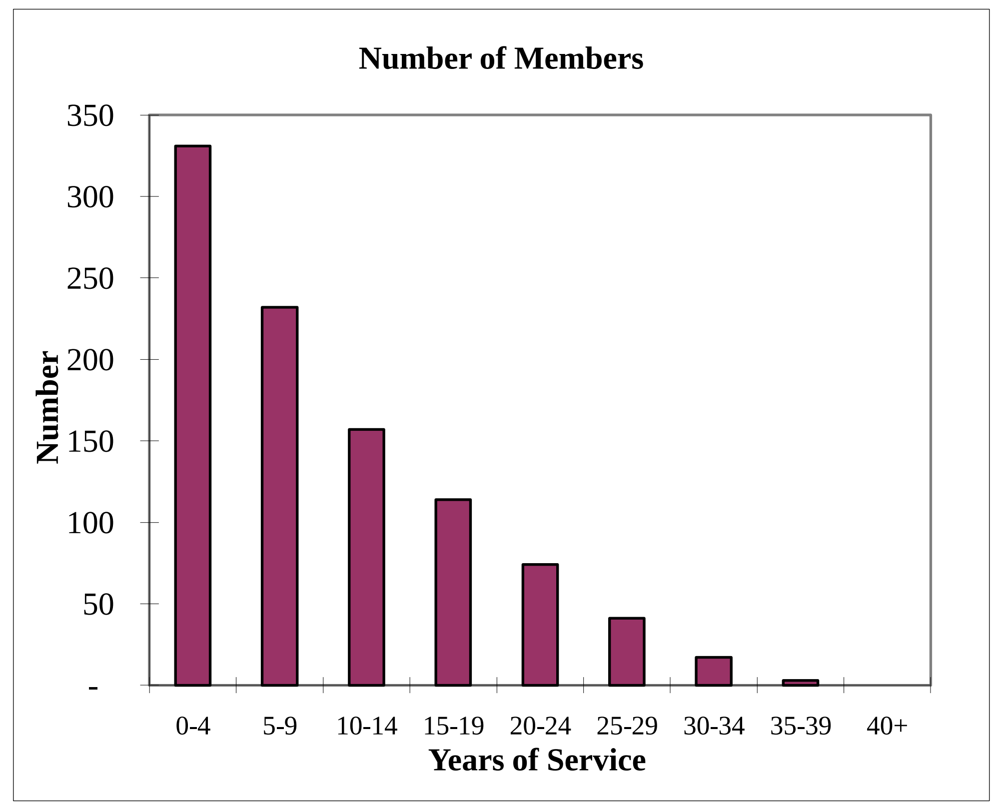
- Employee age has increased by 2.6 years and service has increased by 2.9 years over the course of the past eleven years. Average annual compensation has grown by 92.3% over the same time period (6.1% per year). Part of this is due to the exclusion of employees earning less than $5,000 annually whereas they were included in prior valuations. Excluding these employees increased the average pay by 23% from 2008 to 2010. The average pay for employees earning more than $5,000 in the 2008 valuation was $27,620. This would have resulted in an increase of 10% or 4.9% per year since 2008.

The charts on the following pages summarize demographic information regarding active and retiree members.

FRANKLIN REGIONAL RETIREMENT SYSTEM
Distribution of Plan Members as of January 1, 2010
Active Members

AGE	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 + Years	Total	Total Compensation	Average Compensation
0-19	-	-	-	-	-	-	-	-	-	-	$ -	$ -
20-24	21	-	-	-	-	-	-	-	-	21	484,536	23,073
25-29	44	8	-	-	-	-	-	-	-	52	1,487,699	28,610
30-34	37	23	1	-	-	-	-	-	-	61	1,748,232	28,660
35-39	43	18	15	-	1	-	-	-	-	77	2,437,965	31,662
40-44	44	31	19	8	3	-	-	-	-	105	3,099,549	29,520
45-49	60	45	36	14	13	6	-	-	-	174	5,062,710	29,096
50-54	40	50	31	32	14	7	4	-	-	178	5,728,999	32,185
55-59	29	38	27	35	26	16	6	2	-	179	5,643,617	31,529
60-64	9	16	16	20	11	6	3	-	-	81	2,446,481	30,203
65-69	4	2	10	4	4	4	3	1	-	32	993,321	31,041
70-74	-	1	2	1	1	1	1	-	-	7	275,393	39,342
75-79	-	-	-	-	1	1	-	-	-	2	48,887	24,444
80-84	-	-	-	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	**331**	**232**	**157**	**114**	**74**	**41**	**17**	**3**	**-**	**969**	**$ 29,457,390**	**$ 30,400**





FRANKLIN REGIONAL RETIREMENT SYSTEM
Distribution of Plan Members as of January 1, 2010
Retired Members

Disabled Member

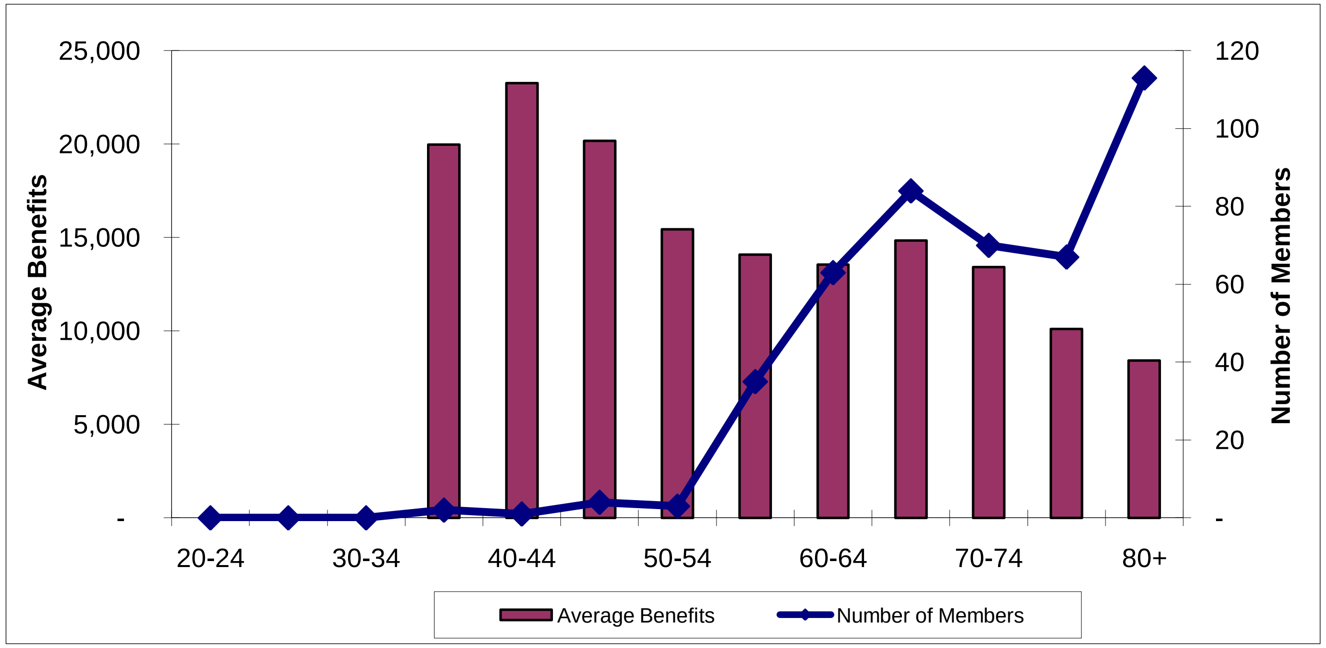
Age	Number	Average Benefit	Total Benefit
20-24	-	-	-
25-29	-	-	-
30-34	-	-	-
35-39	1	35,239	35,239
40-44	1	23,261	23,261
45-49	3	23,788	71,365
50-54	1	39,690	39,690
55-59	3	9,981	29,944
60-64	1	27,431	27,431
65-69	2	19,020	38,040
70-74	2	18,186	36,372
75-79	1	18,927	18,927
80+	1	31,701	31,701
TOTAL	16	$ 21,998	$ 351,970

Retired Members and Beneficiaries

Age	Number	Average Benefit	Total Benefit
20-24	-	-	-
25-29	-	-	-
30-34	-	-	-
35-39	1	4,701	4,701
40-44	-	-	-
45-49	1	9,339	9,339
50-54	2	3,327	6,655
55-59	32	14,476	463,220
60-64	62	13,334	826,689
65-69	82	14,734	1,208,206
70-74	68	13,281	903,105
75-79	66	9,981	658,719
80+	112	8,211	919,661
TOTAL	426	$ 11,738	$ 5,000,295

Total

Age	Number	Average Benefit	Total Benefit
20-24	-	-	-
25-29	-	-	-
30-34	-	-	-
35-39	2	19,970	39,940
40-44	1	23,261	23,261
45-49	4	20,176	80,704
50-54	3	15,448	46,345
55-59	35	14,090	493,164
60-64	63	13,557	854,120
65-69	84	14,836	1,246,246
70-74	70	13,421	939,477
75-79	67	10,114	677,646
80+	113	8,419	951,362
TOTAL	442	$ 12,109	$ 5,352,265



Benefits shown are net of State reimbursed COLA.

VALUATION METHODOLOGY

Stone Consulting, Inc. used the Entry Age Normal actuarial funding method in this actuarial valuation. The use of the Entry Age Normal actuarial funding method is consistent with the requirements of Chapter 32 of the Massachusetts General Laws.

NORMAL COST

		January 1, 2010	% of Payroll*
Gross Normal Cost (GNC)	$	3,701,044	12.6%
Employees Contribution		2,531,686	8.6%
Net Normal Cost (NNC)	$	1,169,358	4.0%
Adjusted to Beginning of Fiscal Year 2012	$	75,333	
Administrative Expense	$	433,736	1.5%
Adjusted Net Normal Cost With Admin. Expense	$	1,678,427	

*Payroll paid in 2009 for employees as of January 1, 2010 is $29,457,390. Payroll for new hires in 2009 was annualized.

- The gross normal cost (GNC) is the “price” of benefits accruing in the current year if the assumptions underlying the normal cost were realized.

- An individual normal cost represents that part of the cost of a member’s future benefits that are assigned to the current year as if the costs are to remain level as a percentage of the member’s pay. Benefits payable under all circumstances (i.e., retirement, death, disability, and terminations) are included in this calculation.

- Anticipated employee contributions to be made during the year are subtracted from the GNC to determine employer normal cost, or net normal cost (NNC).

- Administrative expenses are added to the NNC. The administrative expense does not include investment manager and custodial fees. These fees are considered part of the interest rate assumption that is net of fees.

ACTUARIAL ACCRUED LIABILITY AND FUNDED STATUS

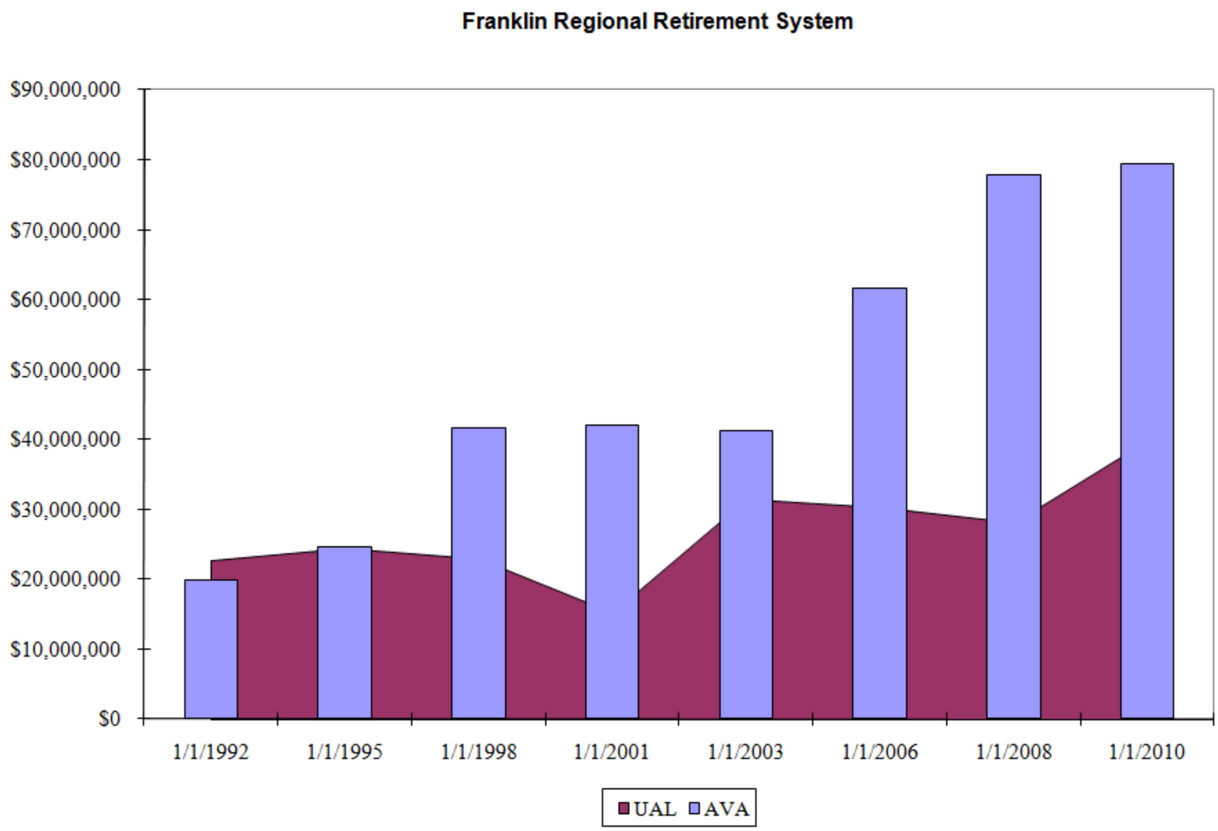
				January 1, 2010	Percentage Change
Active Actuarial Accrued Liability			$	62,901,777	1.1%
Superannuation	$	54,260,455			
Death	$	1,687,655			
Disability	$	4,385,226			
Termination	$	2,568,441			
Retiree, Inactive, Survivor and Beneficiary Actuarial Accrued Liability				56,447,473	28.9%
Retirees and Beneficiaries	$	48,189,345			
Disabled	$	4,224,312			
Inactive	$	4,033,816			
Total Actuarial Accrued Liability (AAL)			$	119,349,250	12.6%
Actuarial Value of Assets (AVA)			$	79,458,638	2.1%
Unfunded Actuarial Accrued Liability			$	39,890,612	41.9%
Funded Ratio (AVA / AAL)					
2010 (7.875% interest rate):		67%			
2008 (8.00% interest rate):		73%			

- Actuarial Accrued Liability (AAL) is the "price" of benefits attributable to benefits earned in past years, or in other words, represents today's value of all benefits earned by active and inactive members.

- The total AAL is $119,349,250. This along with an actuarial value of assets of $79,458,638 produces a funded status of 67% (61% on market value). This compares to a funded status of 73% for the 2008 valuation.

The chart on the following page is a history of the unfunded actuarial accrued liability (UAL) and the valuation assets (AVA) over the course of the past eight actuarial valuations.

HISTORY OF ACTUARIAL VALUATION OF ASSETS (AVA) AND UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAL)



DEVELOPMENT OF FUNDING SCHEDULE

Net Employer Normal Cost for Fiscal 2012	$	1,678,427
Net 3(8)(c) Payments		273,683
Amortization		3,046,255
Total Appropriation	$	4,998,365
Adjustment for semi-annual payments		94,711
Total Appropriation required for Fiscal 2012	$	5,093,076

- The funding schedule is composed of the normal cost, the amortization of the actuarial accrued unfunded liability plus the net difference between 3(8)(c) payments and is adjusted by the administrative expense assumption. The contribution is assumed to be made semi-annually.

- The 3(8)(c) payments are made to and from other Chapter 32 retirement systems and Franklin Retirement System to account for members prior service with retirement systems other than the one from which they retire. The net 3(8)(c) amount increased by about $50,000 since the past valuation.

- The contribution amount for Fiscal 2012 is $5,093,076. The funding schedule is presented on page 16. The schedule's length is nineteen (19) years (for the fresh start base) which is four years longer than the January 1, 2008 valuation schedule's length. The maximum funding schedule length allowed by Chapter 32 of the Massachusetts General Laws is nineteen years to 2030.

- In developing the funding schedule, we used a fresh start approach in which the unfunded actuarial accrued liability, other than the liability associated with the early retirement incentive, is reamortized instead of maintaining the existing amortization amount and separately amortizing the actuarial gain or loss. The use of a fresh-start approach results in a funding schedule in which the changes in contribution amounts from year to year are more consistent. The amortization percentage changed from 2.38% from the January 1, 2008 valuation to 4.26%. The change in amortization increase allows the contribution amount in Fiscal 2012 to be consistent with prior schedules.

FUNDING SCHEDULE

Fiscal Year	Normal Cost	Unfunded Liability	Funding Amortization of UAL	Net 3(8)(c) Payments	Schedule Contribution	Adjusted for Semiannual Payments
2012	1,678,427	41,897,008	3,046,255	273,683	4,998,365	5,093,076
2013	1,749,760	41,910,250	3,168,245	273,683	5,191,688	5,290,063
2014	1,824,125	41,792,938	3,295,432	273,683	5,393,240	5,495,433
2015	1,901,650	41,529,185	3,428,037	273,683	5,603,370	5,709,545
2016	1,982,470	41,101,613	3,566,291	273,683	5,822,444	5,932,771
2017	2,066,725	40,491,229	3,710,434	273,683	6,050,843	6,165,497
2018	2,154,561	39,677,283	3,860,719	273,683	6,288,963	6,408,129
2019	2,246,130	38,637,118	4,017,405	273,683	6,537,218	6,661,088
2020	2,341,591	37,346,016	4,040,283	273,683	6,655,556	6,781,669
2021	2,441,108	35,928,560	4,168,448	273,683	6,883,239	7,013,666
2022	2,544,855	34,261,221	4,346,024	273,683	7,164,562	7,300,320
2023	2,653,012	32,271,018	4,531,165	273,683	7,457,859	7,599,174
2024	2,765,765	29,924,367	4,724,192	273,683	7,763,640	7,910,749
2025	2,883,310	27,184,689	4,925,443	273,683	8,082,435	8,235,585
2026	3,005,850	24,012,162	5,135,267	273,683	8,414,800	8,574,248
2027	3,133,599	20,363,451	5,354,029	273,683	8,761,311	8,927,324
2028	3,266,777	16,191,414	5,582,111	273,683	9,122,570	9,295,429
2029	3,405,615	11,444,786	5,819,909	273,683	9,499,206	9,679,202
2030	3,550,354	6,067,837	6,067,837	273,683	9,891,873	10,079,309
2031	3,701,244	0	-	273,683	3,974,927	4,050,245

Amortization of Unfunded Liability as of July 1, 2011

Year	Type	Original Amort. Amount	Percentage Increasing	Original # of Years	Current Amort. Amount	Years Remaining
2005	ERI	140,483	0.00%	15	140,483	8
2006	ERI	42,155	0.00%	15	42,155	9
2012	Fresh Start	2,863,617	4.26%	19	2,863,617	19

Year is the year the amortization base was established.
Type is the reason for the creation of the base. Examples are Gain/(Loss) or Fresh Start.
Original Amortization Amount is the annual amortization amount when the base was established.
Percentage Increasing is the percentage that the Original Amortization Amount increases per year.
Original # of Years is the number of years over which the base is being amortized.
Current Amortization Amount is the amortization payment amount for this year.
Years Remaining is the number of years left to amortize the base.
ERI bases were changed to reflect change in interest rate.

ASSUMPTIONS AND METHODOLOGY SUMMARY

The principal actuarial assumptions used in this valuation are the same as the assumptions used in the previous valuation, except where noted, and are summarized in the following table:

Assumption	January 1, 2010 Valuation
Interest Rate	7.875% *(prior valuation used 8.00%)*
Salary Increase	4.25% *(prior valuation used 4.75%)*
COLA	3% of $13,000 ($12,000 prior valuation)
COLA Frequency	Granted every year
Mortality	RP-2000 table projected 10 years with Scale AA. For members retired under an Accidental Disability (job-related), 40% of deaths are assumed to be from the same cause as the disability. Disabled mortality RP-2000 table projected 10 years, ages set forward 2 years. *(Prior valuation used RP2000 without projection)*
Overall Disability	Groups 1 and 2 45% ordinary disability 55% accidental disability Group 4 10% ordinary disability 90% accidental disability
Retirement Rates	Groups 1 and 2 Ages 55 – 70 (previously 65) Group 4 Ages 50 – 65
Administrative Expense	$433,736 budget estimated for FY 2012 provided by Franklin Regional Retirement Board.
Asset Valuation Methodology	Four Year Asset Smoothing

ASSETS

a.	Cash	$	2,290,581.02
b.	Equities		11,363,504.74
c.	Pooled Domestic Equity Funds		5,727,271.38
d.	Pooled Domestic Fixed Income Funds		8,184,877.47
e.	Pooled Real Estate Funds		2,290,257.04
f.	PRIT Fund		41,496,600.23
g.	Sub-Total:	$	71,353,091.88
h.	Interest Due and Accrued		2.37
i.	Accounts Receivable	$	948,223.59
j.	Accounts Payable		(66,193.32)
k.	Sub-Total:	$	882,032.64
l.	**Market Value of Assets** [(g) + (k)]	$	72,235,124.52

- We were furnished with the System's annual report by the Board. The market value of assets as of December 31, 2009 (adjusted for interest due and accrued, payables and receivables) is $72,235,124.52.

- The asset allocation as of December 31, 2009 is approximately 4% cash, receivables, payables and short-term investments, 25% fixed income, and 71% equities, alternative investments, and real estate.

- Historically, 10 to 11% has been the expected long-term rate of return for equities, and 6 to 7% has been the expected long-term rate of return for fixed income securities. Many economists and investment professionals are projecting lower returns of 6.25 to 9.00% for equities and 3.65 to 6.00% for fixed income securities. In light of these projections, as well as historical investment returns, the 7.875% interest rate assumption is within the reasonable assumption range. We encourage close monitoring for changes in investment performance against expectations.

CALCULATION OF VALUATION ASSETS
as of January 1, 2010
4-Year Phase-In of Asset Gains and Losses

1. Market value of assets including receivable/payable as of January 1, 2010 — $72,235,125

2. Phase-in of asset gains and losses

	Plan Year (1)	Original Amount (2)	Percent Unrecognized (3)	Amount Unrecognized (2) x (3)
a.	2009	$5,608,092	75%	$4,206,069
b.	2008	($28,266,169)	50%	($14,133,084)
c.	2007	$1,719,091	25%	$429,773
d.	Total			($9,497,243)

3.	Valuation assets without corridor as of January 1, 2010 (1. - 2.d.)	$81,732,368
4.	Corridor Check	
	a. 90% of Market Value	$65,011,613
	b. 110% of Market Value	$79,458,638
5.	Greater of 3. and 4.a.	$81,732,368
6.	Valuation assets with corridor as of January 1, 2010 Lesser of 5. and 4.b.	$79,458,638
7.	Calculation of return on valuation assets	
	a. Valuation assets as of January 1, 2008	$77,859,319
	b. ER contribs + EE contribs - Ben Pymts - Expenses	3,086,493
	c. Actual return on valuation assets 6. - (7.a. + 7.b.)	($1,487,174)
	d. Weighted value of valuation assets	$77,470,096
	e. Return on valuation assets 7.c. / 7.d.	-1.9%
	f. Annualized return on assets	-1.0%

DISCLOSURE INFORMATION UNDER GASB STATEMENT 25

Schedules of Funding Progress

(Dollars In Thousands)

Actuarial Valuation Date	Actuarial Value of Assets A	Actuarial Accrued Liability B	Unfunded AAL (UAAL) B-A	Funded Ratio A/B	Covered Payroll C	UAAL as a % of Covered Payroll (B-A)/C
1/1/2010	$79,459	$119,349	$39,890	67%	$29,457	135%
1/1/2008	$77,859	$105,972	$28,113	73%	$30,302	93%
1/1/2006	$61,539	$91,823	$30,284	67%	$26,229	115%
1/1/2003	$41,299	$72,770	$31,471	57%	$23,638	133%
1/1/2001	$42,002	$57,235	$15,233	73%	$17,923	85%

Notes to Schedules

Additional information as of the latest actuarial valuation follows:

Valuation date	1/1/2010
Actuarial cost method	Entry Age Normal
Amortization method	Approximate level percent of payroll Closed
Remaining amortization period	19 years for the fresh start retirement benefits schedule; 9 years for the 2006 ERI; and 8 years for the 2005 ERI.
Asset valuation method	Market value adjusted by accounts payable and receivables adjusted to phase in over 4 years investment gains or losses above or below the expected rate of investment return. The actuarial value of assets must be no less than 90% of the adjusted market value nor more than 110% of the adjusted market value. Market value of assets is $72,235,125.

Actuarial assumptions:

Investment Rate of Return	7.875% per year
Projected Salary Increases	4.25% per year

PERAC INFORMATION DISCLOSURE

The most recent actuarial valuation of the System was prepared by Stone Consulting, Inc. as of January 1, 2010

The normal cost for employees on that date was:	$2,531,686	8.6% of payroll
The normal cost for the employer was:	$1,169,358	4.0% of payroll
The actuarial liability for active members was:	$62,901,777	
The actuarial liability for retired members was (includes inactives):	$56,447,473	
Total actuarial accrued liability:	$119,349,250	
System assets as of that date:	79,458,638	
Unfunded actuarial accrued liability:	$39,890,612	
The ratio of system's assets to total actuarial liability was:	67%	
As of that date the total covered employee payroll was:	$29,457,390	

The principal actuarial assumptions used in the valuation are as follows:

Investment Return: 7.875% per annum

Rate of Salary Increase: 4.25% per annum

SCHEDULE OF FUNDING PROGRESS (Dollars in $000's)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
1/1/2010	$79,459	$119,349	$39,890	67%	$29,457	135%
1/1//2008	$77,859	$105,972	$28,113	73%	$30,302	93%
1/1/2006	$61,539	$91,823	$30,284	67%	$26,229	115%
1/1/2003	$41,299	$72,770	$31,471	57%	$23,638	133%
1/1/2001	$42,002	$57,235	$15,233	73%	$17,923	85%

ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Methods

1.	Actuarial Cost Method	The Entry Age Normal Actuarial Cost Method has been used in this valuation. Under this method, the normal cost is the amount calculated as the level percentage of compensation necessary to fully fund the prospective benefits from each member's entry age to retirement age. The actuarial accrued liability represents the theoretical accumulation of all prior years' normal costs for the plan members as if the program had always been in effect. The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over plan assets.
2.	Asset Valuation Method	Market value of assets (adjusted by payables and receivables) adjusted to phase in investment gains or losses above or below the expected rate of investment return over a four-year rolling period. The phase-in is 25% for year one, 50% for year two, 75% for year three and 100% for year four. The actuarial value of assets may be no less than 90%, or more than 110% of the market value of assets plus payables and receivables.
3.	Fiscal Year Adjustment	The actuarial results are adjusted by the valuation interest rate and salary scale to the beginning of Fiscal Year 2012. The unfunded actuarial accrued liability is rolled forward with normal cost and further adjusted by anticipated contributions and interest.

Actuarial Assumptions

1.	Investment Return	7.875% per year net of investment expenses. *(Changed from 8.00%)*
2.	Salary Increases	4.25% per year. *(4.75% prior valuation)*

ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

3. Withdrawal Prior to Retirement

The rates shown at the following sample ages illustrate the withdrawal assumption.

	Rate of Withdrawal	
Age	***Group 1 and 2***	***Group 4***
20	37.51%	3.15%
25	28.23%	2.85%
30	17.35%	2.48%
35	10.07%	1.88%
40	7.21%	0.84%
45	5.68%	0.06%
50	4.57%	0.00%
55	0.00%	0.00%

4. Disability Prior to Retirement

The rates shown at the following sample ages illustrate the assumption regarding the incidence of disability:

	Rate of Disability	
Age	***Group 1 and 2***	***Group 4***
20	0.03%	0.10%
25	0.04%	0.12%
30	0.06%	0.18%
35	0.08%	0.26%
40	0.12%	0.38%
45	0.18%	0.58%
50	0.31%	0.98%
55	0.50%	1.60%
60	0.61%	1.97%

Disability is assumed to be 45% ordinary and 55% accidental for Group 1 and 2 and 10% ordinary and 90% accidental for Group 4.

ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

5. Rates of Retirement

The rates shown at the following ages illustrate the assumption regarding the incidence of retirement, once the member has achieved 10 years of service:

	Rates of Retirement	
Age	***Group 1 and 2***	***Group 4***
50	N/A	2%
51	N/A	2%
52	N/A	2%
53	N/A	2%
54	N/A	2%
55	10%	5%
56	3%	5%
57	3%	5%
58	3%	5%
59	5%	5%
60	5%	10%
61	5%	10%
62	10%	20%
63	10%	20%
64	10%	20%
65	50%	100%
66	35%	N/A
67	35%	N/A
68	35%	N/A
69	35%	N/A
70	100%	N/A

6. Mortality

The RP-2000 mortality table for healthy annuitants (sex-distinct) projected 10 years with Scale AA. *(previously RP-2000 table without projection)*

7. Disabled Life Mortality

The RP-2000 mortality table for healthy annuitants (sex-distinct) projected 10 years with Scale AA set-forward by 2 years. Death is assumed to be due to the same cause as the disability 40% of the time. *(previously RP-2000 table without projection)*

8. Regular Interest Rate Credited to Annuity Savings Account

2% per year.

ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

9.	Family Composition	Members assumed married with 2 dependent children – one male and one female both age 15; age difference between member and spouse assumed to be 3 years (the male being the older).
10.	Cost-of-Living Increases	A 3% COLA on the first $13,000 of a member's retirement allowance is assumed to be granted every year.
11.	Administrative Expenses	Estimated budgeted amount of $433,736 for the Fiscal Year 2012 excluding investment management fees and custodial fee is added to the Normal Cost.
12.	Step Increases	Step increases are assumed to be part of the salary increase assumption.
13.	Credited Service	Service between date of hire and date of membership is assumed to be purchased by all members.
14.	Contribution Timing	Contributions are assumed to be made semi-annually; payments made on July 1 and January 1 of the Fiscal Year.
15.	Valuation Date	January 1, 2010.

SUMMARY OF PRINCIPAL PROVISIONS

1. Participant

Participation is mandatory for all full-time employees whose employment commences before age 65. There are three classes of members in the retirement system:

Group 1: general employees

Group 2: employees in specified hazardous occupations (e.g., electricians)

Group 4: police and firefighters

2. Member Contributions

Member contributions vary depending upon date hired as follows:

Date of Hire	Member Contribution Rate
Prior to 1975	5% of Pay
1975 – 1983	7% of Pay
1984 – June 30, 1996	8% of Pay
After June 30, 1996	9% of Pay

Members hired after 1978 contribute an additional 2% of pay over $30,000.

3. Pay

a. Pay

Gross regular compensation excluding bonuses, overtime, severance pay, unused sick pay, and other similar compensation.

b. Average Pay

The average of pay during the 3 consecutive years that produce the highest average or, if greater, during the last three years (whether or not consecutive) preceding retirement.

4. Credited Service

Period during which an employee contributes to the retirement system plus certain periods of military service and "purchased" service.

SUMMARY OF PRINCIPAL PROVISIONS
(Continued)

5. Service Retirement

a. Eligibility

Completion of 20 years of credited service or attainment of age 55 and completion of 10 years of credited service. If hired prior to 1978 or a member of group 4, attainment of age 55.

b. Retirement Allowance

Determined as the product of the member's benefit percentage, average pay and credited service, where the benefit percentage is shown below (maximum allowance of 80% of average pay):

Benefit Percentage	Group 1	Group 2	Group 4
2.5%	65+	60+	55+
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	N/A	49
1.8	58	N/A	48
1.7	57	N/A	47
1.6	56	N/A	46
1.5	55	N/A	45

In addition, veterans receive an additional $15 per year for each year of credited service up to 20 years.

6. Deferred Vested Retirement

a. Eligibility

Completion of 10 years of credited service (for elected and appointed members, 6 years in the event of involuntary termination).

SUMMARY OF PRINCIPAL PROVISIONS
(Continued)

6. Deferred Vested Retirement *(continued)*

b. Retirement Allowance	Determined in the same manner as 5b. with the benefit payable at age 55, unless deferred until later at the member's option. Member contributions with interest may be withdrawn after separation from service. If contributions are withdrawn, eligibility for retirement benefits is forfeited. Members hired before 1984 receive full interest on contributions that are withdrawn; otherwise, one half the credited interest is provided for members who withdraw after 5 but before 10 years of credited service and no interest is provided for withdrawals before 5 years of credited service.

7. Ordinary Disability Retirement

a. Eligibility	Non-job related disability after completion of 10 years of credited service.
b. Retirement Allowance	Determined in the same manner as 5b. with the benefit payable immediately. Veterans receive 50% of pay (during final year) plus an annuity based on accumulated member contributions with interest.

8. Accidental Disability Retirement

a. Eligibility	Disabled as a result of an accident in the performance of duties. No age or service requirement.
b. Retirement Allowance	72% of pay plus an annuity based on accumulated member contributions with interest. Also, a dependent's allowance per year for each child. Total allowance not to exceed 100% of pay (75% for members hired after 1987).

SUMMARY OF PRINCIPAL PROVISIONS
(Continued)

9. Non-Occupational Death

a. Eligibility	Dies while in active service, but not due to occupational injury. 2 years of service.
b. Retirement Allowance	Benefit as if Option C had been elected (see below). Minimum monthly benefits provided as follows: spouse - $250, first child - $120, each additional child - $90.

10. Occupational Death

a. Eligibility	Dies as a result of an occupational injury.
b. Benefit Amount	Same as 8b.

11. Cost-of-Living Increases	An increase of up to 3% applied to the first $13,000 of annual benefit. Funded by the Municipality from Fiscal Year 1999. Percentage increase is voted on each year by the Retirement Board. Cost-of-living increases granted during Fiscal Year 1982 through Fiscal 1998 are reimbursed by the Commonwealth.

12. Optional Forms of Payment

a. Option A	Allowance payable monthly for the life of the member.
b. Option B	Allowance payable monthly for the life of the member with a guarantee of remaining member contributions with interest.
c. Option C	Allowance payable monthly for the life of the member with 66-2/3% continuing to the member's beneficiary upon the member's death. If the beneficiary predeceases the member, the allowance amount "pops up" to the non-reduced amount.

GLOSSARY OF TERMS

1.	Present Value of Benefits	Represents the dollar value today of all benefits expected to be earned by current members if all actuarial assumptions are exactly realized.
2.	Actuarial Cost Method	The procedure that is used to allocate the present value of benefits between the liability that is attributable to past service (Actuarial Accrued Liability) and that attributable to future service.
3.	Actuarial Assumptions	Estimates are made as to the occurrence of certain events that determine the level of benefits to be paid and how long they will be provided. The more important actuarial assumptions include the investment return on assets, salary increases and the rates of turnover, disability, retirement and mortality.
4.	Actuarial Accrued Liability	The portion of the Present Value of Benefits that is attributable to past service.
5.	Normal Cost	The portion of the Present Value of Benefits that is attributable to benefits to be earned in the coming year.
6.	Actuarial Assets	Market value of assets (adjusted by payables and receivables) adjusted to phase in investment gains or losses above or below the expected rate of investment return over a four-year rolling period starting with the 2006 calendar year investment return. The phase-in is 25% for year one, 50% for year two, 75% for year three and 100% for year four. The actuarial value of assets may be no less than 90%, or more than 110% of the market value of assets plus payables and receivables.
7.	Unfunded Actuarial Accrued Liability	That portion of the Actuarial Accrued Liability not covered by System Assets.
8.	PERAC	Public Employee Retirement Administration Commission, a division of the State government which has regulatory authority over the administration of the retirement system.

9.	PRIT	Pension Reserves Investment Trust Fund is the state controlled and administered fund for the investment of assets for members of the retirement system.
10.	GASB	Government Accounting Standards Board (issues guidance for disclosure of retirement system liabilities).

Acknowledgement of Qualification for January 1, 2010 actuarial valuation of the Franklin Regional Employees' Retirement System:

I, Lawrence Stone, am a consultant for Stone Consulting, Inc. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Lawrence B. Stone
Member, American Academy of Actuaries