

REPORT ON THE
SIXTY-FIFTH ACTUARIAL VALUATION
OF THE STATE TEACHERS'
RETIREMENT SYSTEM OF VERMONT
PREPARED AS OF JUNE 30, 2012

OCTOBER 23, 2012

October 23, 2012

Board of Trustees
State Teachers' Retirement System of Vermont
Montpelier, Vermont 05609

Dear Board Members:

Section 1942, subsection (n), of Title 16, Chapter 55, Vermont Statutes Annotated, relating to the State Teachers' Retirement System of Vermont, provides in part that the actuary shall make annual valuations of the system.

The sixty-fifth actuarial valuation of the system, prepared as of June 30, 2012, has now been completed and the results are presented in this report, together with our recommendations in regard to contributions payable by the State. The Table of Contents, which immediately follows, outlines the material contained in this report.

On the basis of the current valuation, we recommend that a normal contribution of 1.92% of covered compensation and a payment of \$54,374,594 towards the liquidation of the unfunded accrued liability be made. Base on the reported payroll, the total contribution amounts to \$65,149,236 for the year beginning July 1, 2012. Schedule G provides the estimated contributions for the following two fiscal years.

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the Academy to render the actuarial opinions contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,



David L. Driscoll, F.S.A., E.A., M.A.A.A.
Principal, Consulting Actuary

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REPORT ON THE SIXTY-FIFTH ACTUARIAL VALUATION OF THE
STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT
PREPARED AS OF JUNE 30, 2012

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below:

Valuation Date	June 30, 2011	June 30, 2012
Active members		
Vested	7,780	7,941
Not vested	<u>2,343</u>	<u>2,321</u>
Total	10,123	10,262
Compensation	\$547,748,405	\$561,179,272
Average age	46.94	46.87
Average service	13.75	13.06
Average compensation	\$54,109	\$54,685
Retired members and beneficiaries		
Number	7,005	7,376
Annual retirement allowances	\$117,019,135	\$128,765,217
Inactive members	2,675	2,193
Terminated vested members	647	793
Adjusted assets for valuation	\$1,486,698,448	\$1,517,410,471
Unfunded actuarial accrued liability	\$845,107,880	\$945,502,316
Annual actuarial accrued liability contribution	\$47,504,388	\$54,374,594
Normal contribution rate	1.80%	1.92%

2. Comments on the results of the valuation are given in Section IV and further discussion of the contribution levels is provided in Section V.
3. Schedule B outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes in the assumptions since the last valuation. The assumptions were based on a recent experience study covering the period from July 1, 2005, through June 30, 2010. The mortality assumptions are adopted by the Board based on the study. The next experience study will take account of the requirement made in the latest revision of Actuarial Standard of Practice No. 35 to take account of future longevity improvements in the selection of mortality assumptions. It is beyond the scope of the valuation to evaluate the possible effect such a change might have.
4. Schedule C outlines the benefit provisions taken into account in the valuation. There have been no changes in benefit provisions since the last valuation.
5. An analysis of the actuarial experience of the System during the past fiscal year is presented in Section IV of this report. Some aspects of this experience are presented in graphs included in Section VI of this report.
6. Schedule F shows a graph of projected benefit payments over the next ten years.
7. Schedule G shows projected state contributions to the System for the two following fiscal years.

SECTION II - MEMBER DATA

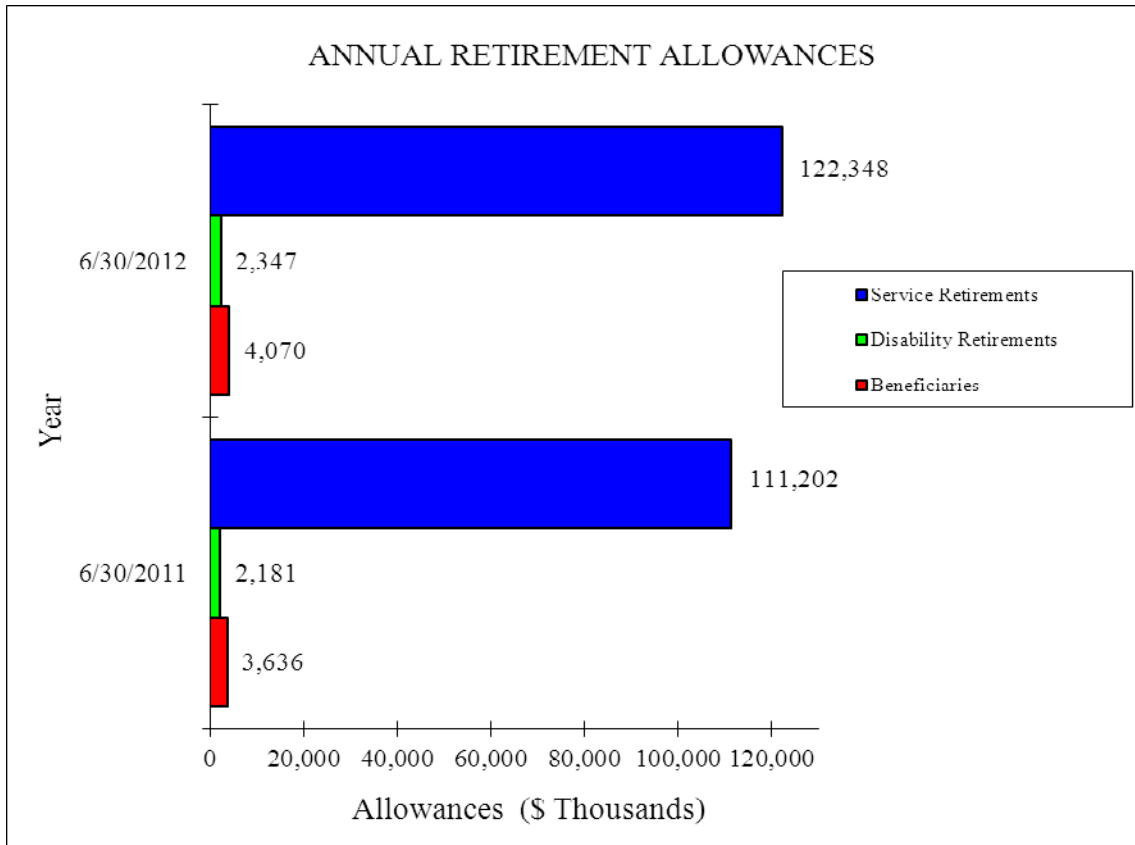
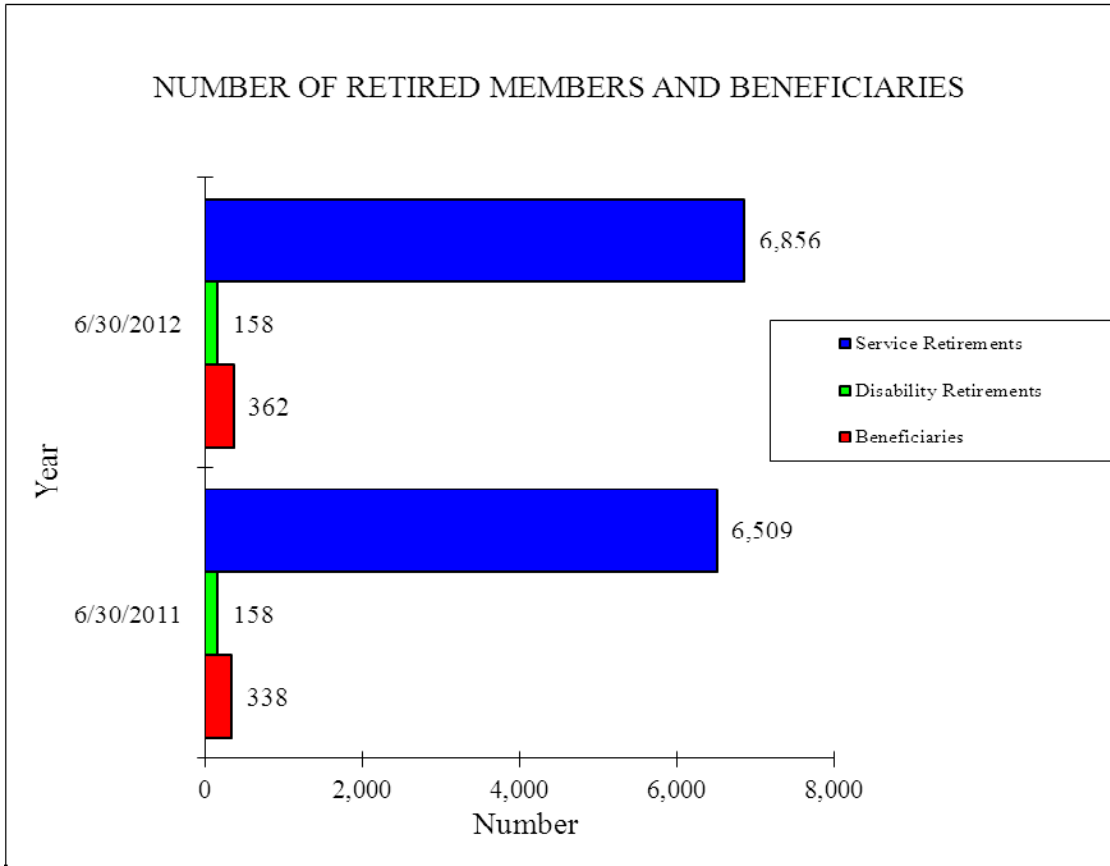
1. Member data were furnished by the Retirement Division of the State Treasurer's Office.
2. Schedule D presents tables that summarize active members, by age and service and service pensioners, disability pensioners and beneficiaries by annual benefit levels.
3. The following tables show a summary of membership of the system:

THE NUMBER AND ANNUAL ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES AS OF JUNE 30, 2012

Group	Number	Annual Allowances
Service Retirements	6,856	\$122,348,396
Disability Retirements	158	\$2,346,930
Beneficiaries of Deceased Members	362	\$4,069,891
TOTAL	7,376	\$128,765,217

THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS AS OF JUNE 30, 2012

Group	Number	Annual Allowances
Group A	15	\$1,092,362
Group C	10,247	\$560,086,910
TOTAL	10,262	\$561,179,272



SECTION III – ASSETS

1. The asset values and cash flow amounts shown below were taken from reports supplied by the Office of the State Treasurer. The information contained in the reports has not yet been audited by Buck but is believed to be sufficiently accurate for purposes of this valuation.
2. For actuarial purposes, the assets are valued using a method that reflects the market value of assets through gradual recognition of return on assets that differ from the assumed 6.25% rate of return, provided the adjusted asset value is within 20% of the market value. The following shows the development of the valuation assets.

Assets for valuation purposes, June 30, 2011			\$ 1,486,698,448
Cash flow during year (net of investment income)			
Contributions paid	\$	88,065,116	
Benefit payouts		(119,713,933)	
Expenses		(28,680,524)	
Net			(60,329,341)
Expected investment income (6.25%)			97,489,006
Preliminary asset value			\$ 1,523,858,113
Market value, June 30, 2012	\$	1,491,619,901	
Preliminary asset value		1,523,858,113	
Unrecognized appreciation	\$	(32,238,212)	
Adjustment		x 20%	\$ (6,447,642)
Assets for valuation purposes, June 30, 2012			\$ 1,517,410,471

3. The assets for valuation purposes are 101.7% of market value.
4. The investment rate of return for the year ending June 30, 2012, is 6.25%, based on the valuation assets.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of the report contains the valuation balance sheet, which shows the present and prospective assets and liabilities of the system as of June 30, 2012.
2. The adjusted assets of the system amount to \$1,517,410,471.
3. The actuarial accrued liability for current retired members, terminated vested members and beneficiaries amounts to \$1,441,535,618, and the actuarial accrued liability for current active and inactive members amounts to \$1,021,377,169, for a total actuarial accrued liability of \$2,462,912,787. Therefore, after subtracting assets of \$1,517,410,471, the unfunded actuarial accrued liability is \$945,502,316.
4. The State's contributions consist of a normal contribution and an accrued liability contribution. The accrued liability contribution represents the amount necessary to liquidate the unfunded accrued liability as of June 30, 2012, over a 26-year period from that date in installments that increase by 5% per year. Normal contributions represent the contributions needed to fund the benefits earned during the year. Under the Entry Age Normal funding method, the normal contribution as of June 30, 2012, is \$10,774,642, or 1.92% of members' compensation.
5. The expected unfunded actuarial accrued liability as of June 30, 2012, may be compared to the actual actuarial accrued liability to determine the gain or loss during the year. The following table presents a summary of the approximate effects of major experience factors affecting the system's unfunded actuarial accrued liability since June 30, 2011.

1. Unfunded liability, 6/30/2011	\$845,107,880
2. Total Normal cost	35,205,405
3. Contribution	(88,065,116)
4. Interest on 1, 2 and 3	52,309,253
5. Changes in Actuarial Assumptions	0
6. Changes in System Provisions	0
7. Restart of Select and Ultimate Interest Rate Set	43,012,727
8. Expected unfunded liability, 6/30/2012	887,570,149
9. Accrued liability, 6/30/2012	2,462,912,787
10. Actuarial value of assets, 6/30/2012	1,517,410,471
11. Actual unfunded liability, 8. - 9.	945,502,316
12. Total gain/(loss), 7. - 10.	(\$57,932,167)

Sources of gain/(loss)	
Investment experience	\$ 8,003
Investment expenses	(6,455,645)
Expenses other than investment expenses	(23,121,145)
Retirement experience	(16,962,996)
Termination experience	(54,234,810)
Disability experience	(1,034,926)
Mortality among active participants	(524,120)
Mortality among retirees, beneficiaries and terminated vested participants.	(3,714,323)
Salary experience	18,940,673
COLA experience	(2,591,239)
New entrants with prior service	(2,751,161)
Other (Data corrections, service purchases, etc)	34,509,522
Total	\$ (57,932,167)

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 1942, Subsection (n), of Title 16, Chapter 55, Vermont Statutes Annotated, relating to the State Teachers' Retirement System of Vermont, indicates that the actuary shall submit to the Board of Trustees his recommendation as to the contributions payable by the State based on annual valuations of the assets and liabilities of the system.
2. On the basis of the results of the current valuation, the actuary recommends that the Board of Trustees certify the following contributions for the fiscal year commencing July 1, 2012:

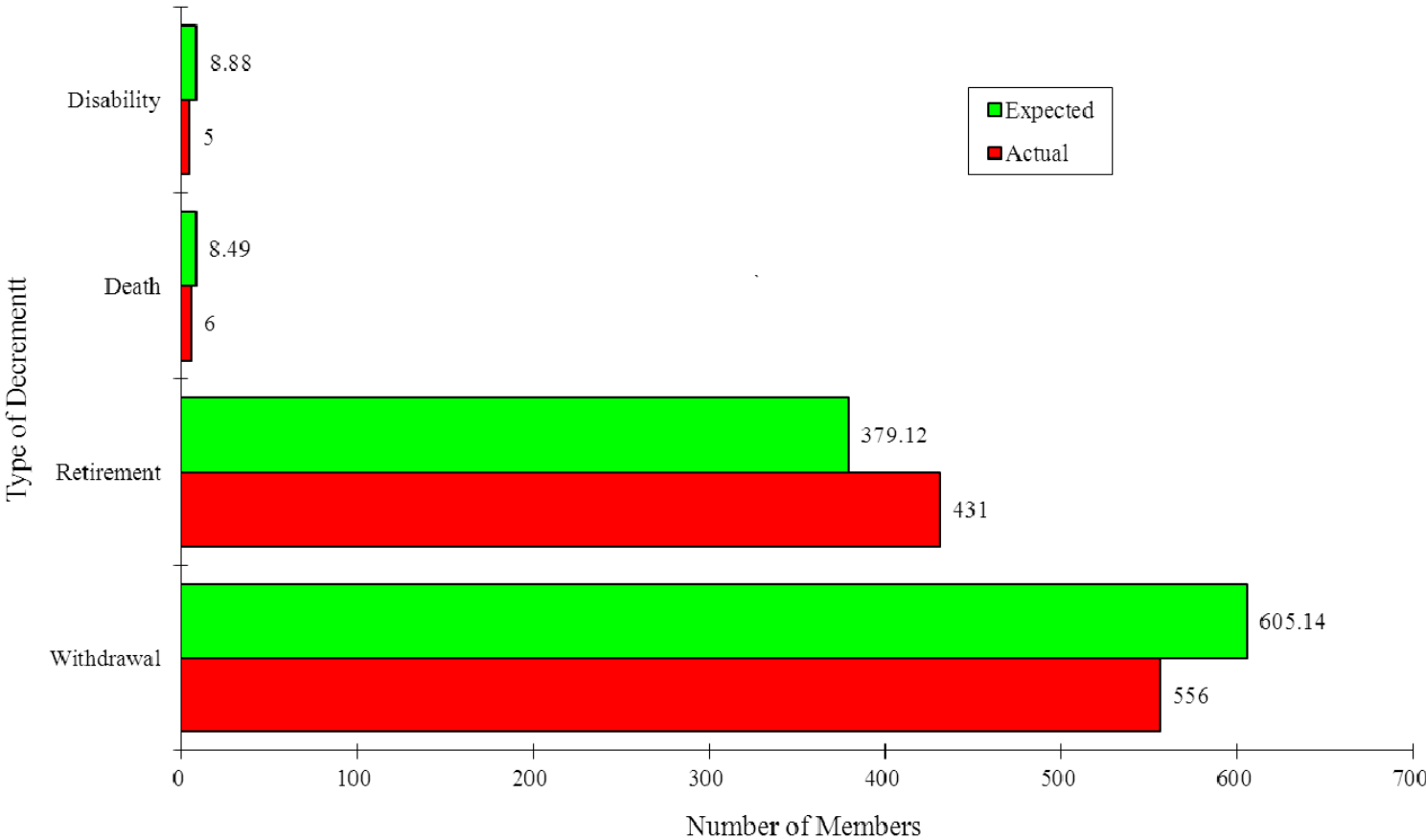
Normal contribution	\$10,774,642
Accrued liability contribution	<u>54,374,594</u>
Total	\$65,149,236

SECTION VI – EXPERIENCE

1. Records are maintained whereby the actual experience of the system may be compared with the expected experience based on the tables adopted by the Board of Trustees. This experience is reviewed periodically, in accordance with the applicable statutes, and any change suggested by the cumulative experience of the system will be recommended to the Board.
2. The active service and salary experience for the latest year is summarized in graphs on the following pages.

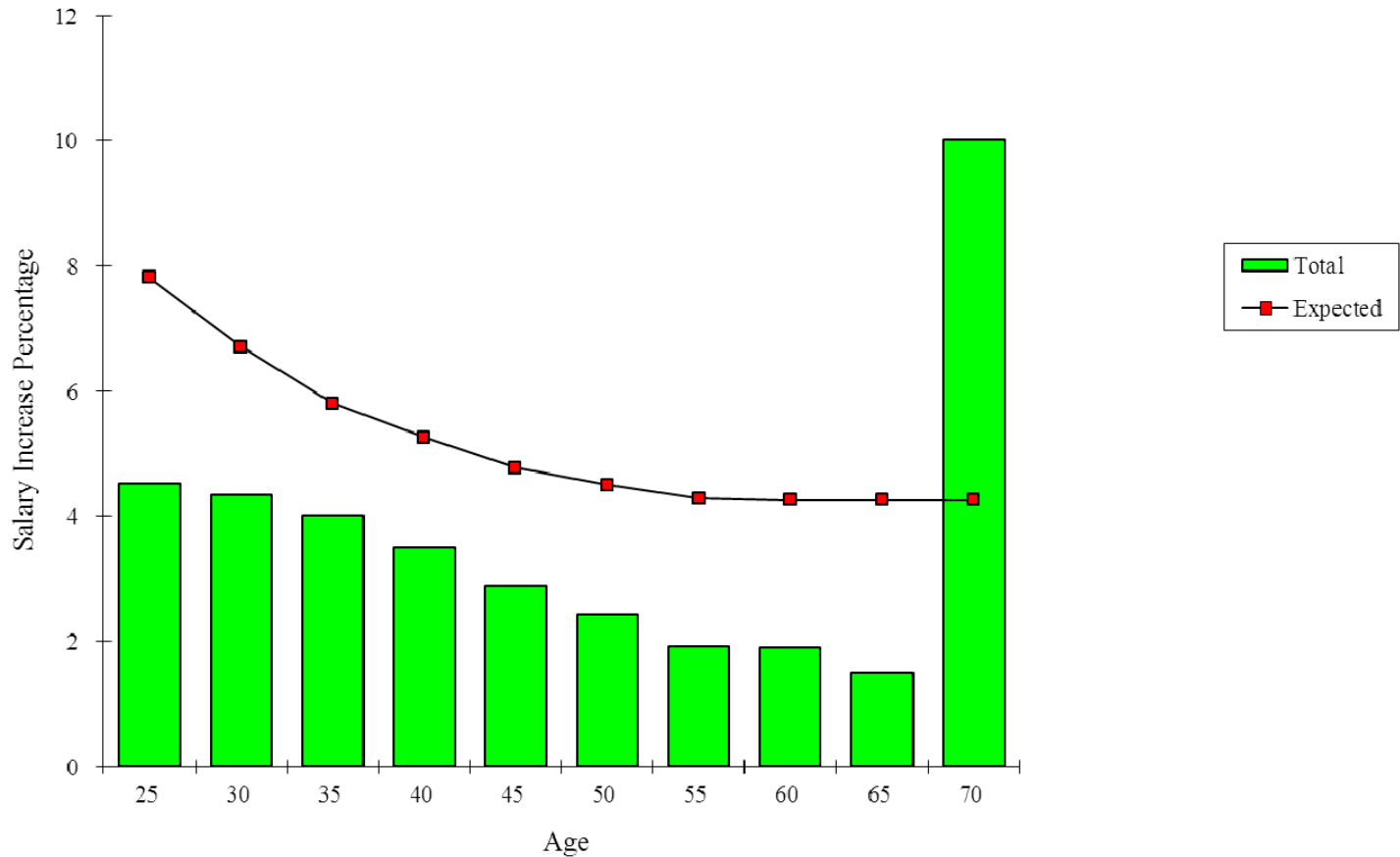
ACTIVE SERVICE EXPERIENCE

July 1, 2011
through June 30, 2012



GROUP C SALARY EXPERIENCE

JULY 1, 2011 THROUGH JUNE 30, 2012



SECTION VII - ACCOUNTING INFORMATION

1. Based on our interpretation of Statement No. 25 of the Governmental Accounting Standards Board (GASB), we are providing the following Schedule of Funding Progress for accounting purposes.

SCHEDULE OF FUNDING PROGRESS

(dollar amounts in thousands)

Year Ending June 30	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 Percentage of Covered Payroll ((b-a)/c)
2012	\$1,517,410	\$2,462,913	\$945,502	61.6%	\$561,179	168.5%
2011	1,486,698	2,331,806	845,108	63.8%	547,748	154.3%
2010	1,410,368	2,122,191	711,823	66.5%	562,150	126.6%
2009	1,374,079	2,101,838	727,759	65.4%	561,588	129.6%
2008	1,605,462	1,984,967	379,505	80.9%	535,807	70.8%
2007	1,541,860	1,816,650	274,790	84.9%	515,573	53.3%
2006	1,427,393	1,686,502	259,108	84.6%	499,044	51.9%
2005	1,354,006	1,492,150	138,144	90.7%	468,858	29.5%
2004	1,284,833	1,424,661	139,829	90.2%	453,517	30.8%
2003	1,218,001	1,358,822	140,821	89.6%	437,239	32.2%
2002	1,169,294	1,307,202	137,908	89.5%	418,904	32.9%
2001	1,116,846	1,254,341	137,496	89.0%	403,258	34.1%
2000	1,037,466	1,174,087	136,621	88.4%	387,999	35.2%
1999	931,056	1,065,754	134,698	87.4%	372,299	36.2%
1998	821,977	955,694	133,717	86.0%	357,899	37.4%
1997	717,396	849,179	131,783	84.5%	364,695	36.1%

Please note: the System's funding method was changed from Entry Age Normal with Frozen Initial Liability to Entry Age Normal effective with the 2006 actuarial valuation.

2. GASB Statement No. 27 requires the development of Annual Pension Cost and Net Pension Obligation. This development is shown in the following table.

DEVELOPMENT OF PENSION COST AND NET PENSION OBLIGATION (NPO)

Year Ending June 30	Annual Required Contribution	Interest on NPO	Amortization of NPO	Pension Cost (1)+(2)-(3)	Actual Contribution	Change in NPO (4)-(5)	NPO Balance
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1995	27,451,926	3,199,910	3,544,821	27,107,015	18,080,000	9,027,015	46,673,017
1996	29,884,559	3,967,206	4,374,228	29,477,537	11,480,000	17,997,537	64,670,554
1997	30,954,237	5,496,997	4,228,309	32,222,925	18,080,000	14,142,925	78,813,479
1998	33,519,949	6,699,146	5,320,758	34,898,337	18,106,581	16,791,756	95,605,235
1999	27,232,542	8,126,445	6,679,063	28,679,924	18,080,000	10,599,924	106,205,159
2000	23,573,184	9,027,439	7,696,429	24,904,194	18,586,240	6,317,954	112,523,113
2001	20,882,521	9,564,465	8,481,287	21,965,699	19,143,827	2,821,872	115,344,985
2002	21,965,322	9,804,324	9,069,835	22,699,811	20,446,282	2,253,529	117,598,514
2003	23,197,088	9,995,874	9,679,438	27,711,317	20,446,282	7,267,035	124,865,549
2004	29,608,892	9,989,244	10,799,409	28,798,727	24,446,282	4,352,445	129,217,994
2005	43,592,332	10,337,440	11,445,481	42,484,291	24,446,282	18,038,009	147,256,003
2006	49,923,599	11,780,480	13,862,402	47,841,677	24,985,506	22,856,171	170,112,174
2007	38,200,000	14,034,254	17,120,008	35,114,246	38,496,410	(3,382,164)	166,730,009
2008	40,749,097	13,755,226	8,874,356	45,629,967	40,955,566	4,674,401	171,404,411
2009	37,077,050	14,140,864	9,326,363	41,891,551	37,349,818	4,541,733	175,946,144
2010	41,503,002	14,515,557	9,798,491	46,220,068	41,920,603	4,299,465	180,245,609
2011	48,233,006	14,870,263	9,807,425	53,295,844	50,268,131	3,027,713	183,273,322
2012	51,241,932	11,454,583	10,301,984	52,394,531	56,152,011	(3,757,480)	179,515,842

3. The Annual Required Contribution for fiscal year 2012 is derived as follows:

\$10,574,040 Normal cost component of FY 2012 recommended contribution reported in the 2010 actuarial valuation report.

\$40,667,892 Amortization of unfunded liability in FY 2012 recommended contribution reported in the 2010 actuarial valuation report.

\$51,241,932 Total

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT
PREPARED AS OF JUNE 30, 2012

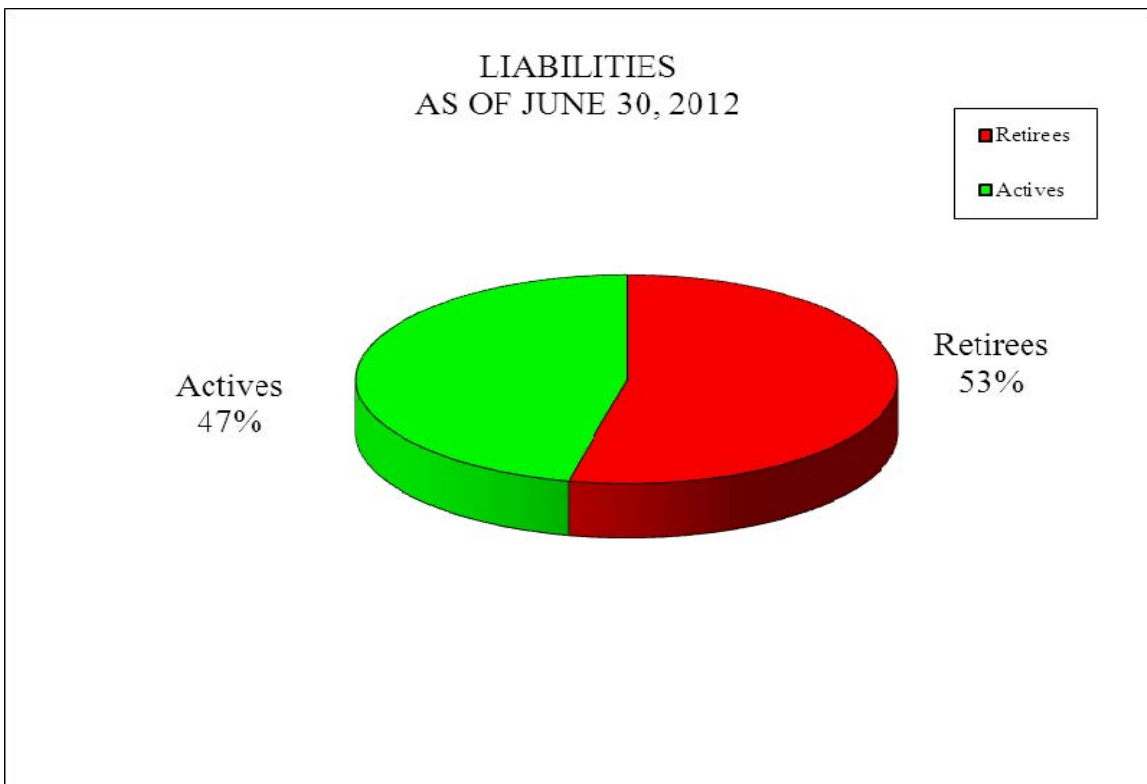
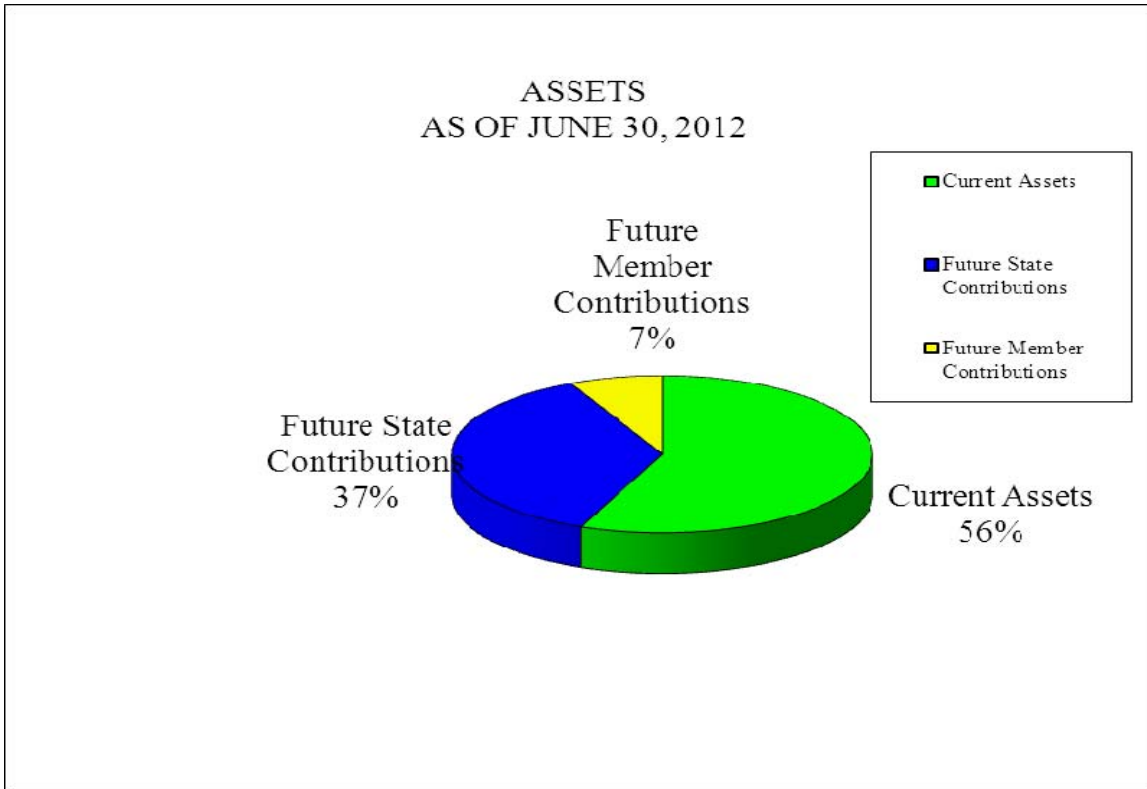
VALUATION BALANCE SHEET
 SHOWING THE ASSETS AND LIABILITIES OF THE
 STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT
 PREPARED AS OF JUNE 30, 2012

ASSETS

Adjusted assets of the system		\$1,517,410,471
Present value of prospective contributions		
Members	\$192,260,367	
State		
Accrued liability contributions	945,502,316	
Normal contributions	<u>57,909,676</u>	
Total prospective contributions		<u>\$1,195,672,359</u>
Total assets		<u>\$2,713,082,830</u>

LIABILITIES

Actuarial present value of benefits payable on account of present retired members, terminated vested members and beneficiaries		\$1,441,535,618
Actuarial present value of benefits expected to become payable on account of active and inactive members		<u>1,271,547,212</u>
Total liabilities		<u>\$2,713,082,830</u>



SCHEDULE B

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: A select-and-ultimate interest rate set, specified below. The interest rate set is restarted every year.

Year 1: 6.25%	Year 10: 8.50%
Year 2: 6.75%	Year 11: 8.50%
Year 3: 7.00%	Year 12: 8.50%
Year 4: 7.50%	Year 13: 8.50%
Year 5: 7.75%	Year 14: 8.50%
Year 6: 8.25%	Year 15: 8.50%
Year 7: 8.25%	Year 16: 8.75%
Year 8: 8.25%	Year 17 and later: 9.00%
Year 9: 8.50%	

SEPARATIONS BEFORE NORMAL RETIREMENT: Representative values of the assumed annual rates of withdrawal, vested retirement, early retirement, disability and death are as follows:

Age	Withdrawal and Vested Retirement		Disability				Death	
			Current Valuation		Prior Valuation			
	Males	Females	Males	Females	Males	Females	Males	Females
25	20.00%	20.00%	.010%	.015%	.010%	.015%	.02%	.02%
30	12.00	14.00	.015	.015	.015	.015	.02	.02
35	8.00	11.30	.020	.015	.020	.015	.02	.02
40	6.50	8.60	.030	.020	.030	.020	.05	.02
45	5.80	6.00	.053	.045	.053	.045	.05	.04
50	5.40	5.00	.067	.070	.180	.180	.07	.06
55	5.40	4.84	.088	.095	.440	.390	.07	.10
59	5.40	4.84	.234	.142	1.170	.710	.09	.14
60	5.40	4.84	.294	.168	1.470	.840	.09	.15
61	5.40	4.84	.366	.202	1.830	1.010	.297	.17

Age	Reduced Early Retirement		Full Early Retirement	
	Grandfathered	Non-Grandfathered	Grandfathered	Non-Grandfathered
50	-	-	40.00%	25.00%
55	8.75%	8.75%	20.00	20.00
56	6.25	6.25	10.00	10.00
57	6.25	6.25	10.00	10.00
58	6.25	6.25	10.00	10.00
59	6.25	6.25	10.00	10.00
60	12.50	12.50	30.00	17.00
61	12.50	12.50	17.00	17.00

SERVICE RETIREMENTS: Occur between ages 62 (60 for Group A) and 70. The assumed rates of service retirement are as follows:

Age	Annual Rate of Retirement	
	Grandfathered	Non-Grandfathered
62	25.0%	20.0%
63	20.0	20.0
64	20.0	20.0
65	30.0	30.0
66	30.0	30.0
67	30.0	30.0
68	20.0	20.0
69	30.0	30.0
70	100.0	100.0

SALARY INCREASES: Representative values of the assumed annual rates of future salary increase are as follows:

Age	Annual Rate of Salary Increase	
	Current Valuation	Prior Valuation
25	8.40%	10.68%
30	7.05	8.10
35	6.15	7.30
40	5.45	6.03
45	4.95	5.49
50	4.60	4.95
55	4.35	4.59
60	4.25	4.41
64	4.25	4.41

DEATHS AFTER RETIREMENT: The 1995 Buck Mortality Tables set back three years for males and one year for females, for retirees, terminated vested members and beneficiaries; the RP-2000 Disabled Life Table with projection to 2016 using Scale AA for disabled retirees. The tables used contain a margin to reflect anticipated mortality improvement after the valuation date.

INFLATION: The separately stated assumptions for investment return, salary increases and cost of living adjustments are consistent with an expected annual inflation rate of 3.00% to 3.25% per year.

FUTURE EXPENSES: No provision made.

SPOUSE'S AGE: Husbands are assumed to be three years older than their wives.

PERCENT MARRIED: 85% of the male members and 35% of the female members are assumed to be married.

COST-OF-LIVING ADJUSTMENTS: Assumed to occur on January 1 following one year of retirement at the rate of 3% per annum for Group A members and 1.5% per annum for Group C member (beginning at age 62 for Group C members who elect reduced early retirement).

INACTIVE MEMBERS: A liability equal to 350% of accumulated contributions of inactive members is included in the valuation liabilities.

ACTUARIAL COST METHOD: The individual entry age normal actuarial cost method was used. For actuarial valuations prior to June 30, 2006, the entry age normal method with frozen initial liability was used.

ASSET VALUATION METHOD: The amount of the assets for valuation purposes equals the preliminary asset value plus 20% of the difference between the market and preliminary asset values. The preliminary asset value is equal to the previous year's asset value (for valuation purposes) adjusted for contributions less benefit payments and expenses and expected investment income. If necessary, a further adjustment is made to ensure that the valuation assets are within 20% of the market value.

MEMBER DATA: 402 members terminated on June 30, 2012 and retired on July 1, 2012 were included with a valuation status as members receiving benefits. 374 members who were active on June 30, 2012 and terminated on July 1, 2012, were included with a valuation status as inactive. 466 members who terminated with at least five years of service and have not withdrawn from the Fund within six years of their termination were included with an inactive valuation status. The System will automatically vest these participants six years after their termination if they do not withdraw.

HEALTH AND MEDICAL BENEFITS FOR RETIREES: Not included in this valuation.

SCHEDULE C

BRIEF SUMMARY OF PRINCIPAL PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

BRIEF SUMMARY OF PRINCIPAL PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Effective Date	July 1, 1947.
Creditable Service	Service as a member plus purchased service.
Average Final Compensation (AFC)	Average annual compensation during highest 3 successive years.
Membership	Immediate upon employment.
Grandfathered status	Group C members who were within five years of normal retirement eligibility as defined prior to July 1, 2010, are “grandfathered”

GROUP A

GROUP C

Service Retirement Allowance

Eligibility	Age 60 or 30 years of creditable service.	Grandfathered: Age 62 or 30 years of creditable service for. Non-Grandfathered: Age 65 or age plus creditable service equal 90.
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	<u>GROUP A</u>	<u>GROUP C</u>
Amount of Allowance	Member annuity based on accumulated contributions plus a pension which, with member annuity, equals 1/60 of AFC times creditable service.	<p>Grandfathered:</p> <p>Member annuity based on accumulated contributions plus a pension which, with member annuity, equals 1/80 of AFC times creditable service prior to July 1, 1990 plus 1/60 of AFC times creditable service after July 1, 1990.</p> <p>Non Grandfathered:</p> <p>Member annuity based on accumulated contributions plus a pension which, with member annuity, equals 1/80 of AFC times creditable service prior to July 1, 1990 plus 1/60 of AFC times creditable service after July 1, 1990 up to 20 years of service, plus 1/50 of AFC for years of service after 20.</p> <p>If member already has 20 or more years of service on June 30, 2010, the 1/50 will be applied to all service accrued after July 1, 2010.</p>
Minimum	\$6,600 after 30 years of creditable service (pro-rata portion if less than 30 years).	N/A

	<u>GROUP A</u>	<u>GROUP C</u>
Maximum	None	Grandfathered: 50% of AFC up to June 30, 2010. May continue to accrue up to 53.34% of AFC with service earned after July 1, 2010. Non-Grandfathered: 60% of AFC.
Early Retirement Allowance		
Eligibility	Age 55.	Age 55 and 5 years of creditable service.
Amount of Allowance	Actuarial equivalent of service allowance using AFC and creditable service at early retirement.	Grandfathered: Accrued normal benefit reduced 6% for each year under age 62. Non-Grandfathered: Accrued normal benefit reduced by actuarial reduction from normal retirement age.
Vested Retirement Allowance		
Eligibility	5 years of creditable service.	5 years of creditable service.
Amount of Allowance	Commencing at age 60 calculated as a service allowance using AFC and creditable service at termination.	Commencing at age 62, calculated as a service allowance using AFC and creditable service at termination.
Disability Retirement Allowance		
Eligibility	Total and permanent disability after 5 years of creditable service (5 years preceding retirement served in State).	Total and permanent disability after 5 years of creditable service (5 years preceding retirement served in State).

	<u>GROUP A</u>	<u>GROUP C</u>
Amount of Allowance	Calculated as a service allowance based on AFC and creditable service at disability retirement, subject to a 25% of AFC minimum.	Calculated as a service allowance based on AFC and creditable service at disability retirement, subject to a 25% of AFC minimum.
Death Benefits		
Eligibility	Age 60 or 30 years of creditable service; 10 years of creditable service if in service at death.	Age 55 and 5 years of creditable service or 10 years of creditable service.
Amount of Allowance	Accrued allowance paid under 100% survivorship option. If the eligibility requirements are not met or if beneficiary so elects, the member's accumulated contributions are paid to the beneficiary or estate. Certain children's benefits may also be payable.	Accrued allowance paid under 100% survivorship option. If the eligibility requirements are not met or if beneficiary so elects, the member's accumulated contributions are paid to the beneficiary or estate. Certain children's benefits may also be payable.
Return of Contributions	If no other beneficiary is payable, a terminated member receives his accumulated contributions with interest.	If no other beneficiary is payable, a terminated member receives his accumulated contributions with interest.
Options	The allowance may be paid in various optional forms at the election of the member.	The allowance may be paid in various optional forms at the election of the member.

	<u>GROUP A</u>	<u>GROUP C</u>
Post-retirement Adjustments	On each December 31 allowances in payment for at least one year are adjusted for cost-of-living changes based on the Consumer Price Index, but not in excess of 5%.	On each December 31, allowances in payment for at least one year are adjusted for cost-of-living changes based on one-half of the increase in the Consumer Price Index, but not in excess of 5%. For members receiving a reduced early retirement allowance, the adjustment will not apply before age 62.
Contributions		
Members	5.5% of earnable compensation. Contributions stop after 25 years of creditable service.	5% of earnable compensation.
State	Normal and accrued liability contributions actuarially determined to keep the system financially sound.	Normal and accrued liability contributions actuarially determined to keep the system financially sound.

SCHEDULE D

SUMMARY TABLES OF MEMBER DATA AS OF JUNE 30, 2012

TABLE 1
THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE
AS OF JUNE 30, 2012

AGE	<i>0 to 4</i>		<i>5 to 9</i>		<i>10 to 14</i>		<i>15 to 19</i>		<i>20 to 24</i>		<i>25 to 29</i>		<i>30 to 34</i>		<i>35 to 39</i>		<i>40 & up</i>		<i>Total</i>	
	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	111	3,445,815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	3,445,815
25 to 29	547	20,269,054	139	6,136,288	0	0	0	0	0	0	0	0	0	0	0	0	0	0	686	26,405,342
30 to 34	478	18,875,304	508	23,893,286	111	5,840,581	0	0	0	0	0	0	0	0	0	0	0	0	1,097	48,609,171
35 to 39	301	11,874,198	429	21,436,167	420	23,072,722	57	3,543,423	0	0	0	0	0	0	0	0	0	0	1,207	59,926,510
40 to 44	258	10,603,331	367	18,789,724	377	21,875,288	320	19,997,598	57	3,809,209	0	0	0	0	0	0	0	0	1,379	75,075,150
45 to 49	198	8,812,545	259	13,798,095	264	15,427,154	248	15,836,344	204	13,648,713	68	4,483,809	0	0	0	0	0	0	1,241	72,006,660
50 to 54	198	8,167,867	250	13,176,361	301	17,210,769	220	13,693,517	241	15,307,033	268	17,718,365	62	4,405,431	0	0	0	0	1,540	89,679,343
55 to 59	127	5,939,950	197	10,102,981	283	16,324,946	258	15,773,319	265	17,736,967	249	16,919,405	263	18,035,681	44	3,050,369	0	0	1,686	103,883,618
60 to 64	78	3,711,974	100	5,362,911	160	9,150,276	158	9,625,956	174	11,096,123	156	10,278,203	132	9,639,713	132	9,273,053	11	821,688	1,101	68,959,897
65 to 69	23	930,597	22	1,281,371	29	1,740,040	15	995,491	28	1,793,499	29	1,905,036	18	1,352,444	19	1,290,835	8	594,486	191	11,883,799
70 & up	2	58,886	3	143,997	5	210,055	2	132,150	1	54,439	2	110,106	1	76,760	4	294,700	3	222,876	23	1,303,969
TOTAL	2,321	92,689,521	2,274	114,121,181	1,950	110,851,831	1,278	79,597,798	970	63,445,983	772	51,414,924	476	33,510,028	199	13,908,957	22	1,639,050	10,262	561,179,272

TABLE 2
 THE NUMBER AND ANNUAL COMPENSATION OF
 ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE
 AS OF JUNE 30, 2012

GROUP A

AGE	<i>0 to 4</i>		<i>5 to 9</i>		<i>10 to 14</i>		<i>15 to 19</i>		<i>20 to 24</i>		<i>25 to 29</i>		<i>30 to 34</i>		<i>35 to 39</i>		<i>40 & up</i>		<i>Total</i>		
	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 to 54	0	0	0	0	0	0	0	0	0	1	51,941	2	164,848	0	0	0	0	0	3	216,789	
55 to 59	0	0	0	0	0	0	0	1	56,532	0	0	5	354,511	2	117,036	0	0	8	528,079		
60 to 64	0	0	0	0	0	0	0	0	0	0	0	1	81,689	0	0	2	187,477	3	269,166		
65 to 69	0	0	0	0	0	0	0	0	0	0	0	1	78,328	0	0	0	0	1	78,328		
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	0	0	0	0	0	0	0	1	56,532	1	51,941	9	679,376	2	117,036	2	187,477	15	1,092,362		

TABLE 3
THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE
AS OF JUNE 30, 2012

GROUP C

AGE	<i>0 to 4</i>		<i>5 to 9</i>		<i>10 to 14</i>		<i>15 to 19</i>		<i>20 to 24</i>		<i>25 to 29</i>		<i>30 to 34</i>		<i>35 to 39</i>		<i>40 & up</i>		<i>Total</i>		
	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	111	3,445,815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	3,445,815	
25 to 29	547	20,269,054	139	6,136,288	0	0	0	0	0	0	0	0	0	0	0	0	0	0	686	26,405,342	
30 to 34	478	18,875,304	508	23,893,286	111	5,840,581	0	0	0	0	0	0	0	0	0	0	0	0	1,097	48,609,171	
35 to 39	301	11,874,198	429	21,436,167	420	23,072,722	57	3,543,423	0	0	0	0	0	0	0	0	0	0	1,207	59,926,510	
40 to 44	258	10,603,331	367	18,789,724	377	21,875,288	320	19,997,598	57	3,809,209	0	0	0	0	0	0	0	0	1,379	75,075,150	
45 to 49	198	8,812,545	259	13,798,095	264	15,427,154	248	15,836,344	204	13,648,713	68	4,483,809	0	0	0	0	0	0	1,241	72,006,660	
50 to 54	198	8,167,867	250	13,176,361	301	17,210,769	220	13,693,517	241	15,307,033	267	17,666,424	60	4,240,583	0	0	0	0	1,537	89,462,554	
55 to 59	127	5,939,950	197	10,102,981	283	16,324,946	258	15,773,319	264	17,680,435	249	16,919,405	258	17,681,170	42	2,933,333	0	0	1,678	103,355,539	
60 to 64	78	3,711,974	100	5,362,911	160	9,150,276	158	9,625,956	174	11,096,123	156	10,278,203	131	9,558,024	132	9,273,053	9	634,211	1,098	68,690,731	
65 to 69	23	930,597	22	1,281,371	29	1,740,040	15	995,491	28	1,793,499	29	1,905,036	17	1,274,116	19	1,290,835	8	594,486	190	11,805,471	
70 & up	2	58,886	3	143,997	5	210,055	2	132,150	1	54,439	2	110,106	1	76,760	4	294,700	3	222,876	23	1,303,969	
TOTAL	2,321	92,689,521	2,274	114,121,181	1,950	110,851,831	1,278	79,597,798	969	63,389,451	771	51,362,983	467	32,830,652	197	13,791,921	20	1,451,573	10,247	560,086,910	

TABLE 4

SUMMARY OF RETIRED MEMBER AND BENEFICIARY DATA
BY LEVEL OF ANNUAL ALLOWANCE AS OF JUNE 30, 2012

ALL TEACHERS

Allowance Level	Service Pensioners		Disability Pensioners		Beneficiaries	
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance
0 - 500	6	\$ 1,086	-	\$ -	-	\$ -
501 - 1,000	15	11,964	-	-	-	-
1,001 - 1,500	30	38,401	-	-	4	5,607
1,501 - 2,000	51	90,882	-	-	6	10,454
2,001 - 2,500	81	181,921	-	-	7	15,498
2,501 - 3,000	122	336,040	-	-	6	16,310
3,001 - 3,500	108	353,136	-	-	11	35,481
3,501 - 4,000	124	467,681	-	-	12	44,842
4,001 - 4,500	151	640,377	-	-	11	46,492
4,501 - 5,000	141	671,798	-	-	10	47,492
5,001 - 5,500	134	704,265	-	-	5	26,321
5,501 - 6,000	115	662,335	-	-	10	56,810
6,001 - 6,500	121	757,115	1	6,270	18	113,903
6,501 - 7,000	130	877,297	2	13,357	11	74,176
7,001 - 7,500	117	848,816	4	29,125	6	42,792
7,501 - 8,000	112	868,064	2	15,454	10	77,243
8,001 - 8,500	102	839,937	2	16,510	16	131,592
8,501 - 9,000	123	1,074,570	6	52,154	14	123,175
9,001 - 9,500	117	1,078,991	7	65,273	12	110,750
9,501 - 10,000	114	1,110,937	8	78,351	13	127,083
10,001 - 10,500	109	1,118,751	5	51,416	13	132,859
10,501 - 11,000	118	1,268,408	13	138,658	11	118,548
11,001 - 11,500	102	1,146,253	10	113,125	11	124,359
11,501 - 12,000	102	1,200,950	4	47,757	9	105,247
12,001 - 12,500	73	892,531	3	36,872	19	232,335
12,501 - 13,000	103	1,313,038	8	101,663	13	165,880
13,001 - 13,500	76	1,008,246	10	132,021	7	92,310
13,501 - 14,000	97	1,334,803	6	82,545	2	27,063
14,001 - 14,500	76	1,083,896	6	85,471	4	56,968
14,501 - 15,000	77	1,134,906	4	58,804	5	73,102
15,001 - 15,500	95	1,445,632	5	75,776	9	136,799
15,501 - 16,000	89	1,401,691	4	62,820	7	110,685
16,001 - 16,500	87	1,414,184	3	48,611	5	81,089
16,501 - 17,000	92	1,541,783	3	50,557	7	118,173
17,001 - 17,500	88	1,520,085	2	34,743	5	86,067
17,501 - 18,000	92	1,631,892	5	88,731	6	106,636
18,001 - 18,500	97	1,769,385	2	36,428	3	54,743
18,501 - 19,000	106	1,986,473	4	75,349	2	37,440
19,001 - 19,500	84	1,615,651	5	96,253	4	76,519
19,501 - 20,000	121	2,390,327	-	-	3	59,300
20,001 - 20,500	114	2,309,791	2	40,676	3	61,269
20,501 - 21,000	114	2,366,843	4	82,901	2	41,405

TABLE 4, continued
SUMMARY OF RETIRED MEMBER AND BENEFICIARY DATA
BY LEVEL OF ANNUAL ALLOWANCE AS OF JUNE 30, 2012

ALL TEACHERS

Allowance Level	Service Pensioners		Disability Pensioners		Beneficiaries	
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance
21,001 - 21,500	122	2,592,038	3	63,853	3	64,144
21,501 - 22,000	125	2,718,442	3	64,917	2	43,475
22,001 - 22,500	145	3,226,964	2	44,420	2	44,470
22,501 - 23,000	117	2,659,215	2	45,416	1	22,756
23,001 - 23,500	114	2,650,239	-	-	2	46,738
23,501 - 24,000	115	2,730,456	-	-	-	-
24,001 - 24,500	90	2,182,762	-	-	-	-
24,501 - 25,000	106	2,623,934	-	-	2	49,131
25,001 - 25,500	112	2,829,231	-	-	-	-
25,501 - 26,000	109	2,808,884	-	-	-	-
26,001 - 26,500	96	2,518,309	1	26,459	1	26,342
26,501 - 27,000	109	2,916,995	1	26,721	-	-
27,001 - 27,500	93	2,534,456	1	27,385	1	27,412
27,501 - 28,000	109	3,026,947	-	-	3	83,016
28,001 - 28,500	88	2,484,974	-	-	1	28,114
28,501 - 29,000	78	2,243,649	-	-	1	28,558
29,001 - 29,500	76	2,222,670	1	29,481	-	-
29,501 - 30,000	73	2,172,628	1	29,948	1	29,676
30,001 - 30,500	58	1,757,000	-	-	-	-
30,501 - 31,000	57	1,752,673	-	-	-	-
31,001 - 31,500	57	1,781,873	-	-	2	62,033
31,501 - 32,000	57	1,809,987	1	31,918	-	-
32,001 - 32,500	53	1,708,152	-	-	-	-
32,501 - 33,000	48	1,571,267	-	-	1	32,603
33,001 - 33,500	49	1,629,336	-	-	1	33,474
33,501 - 34,000	33	1,112,186	-	-	1	33,605
34,001 - 34,500	38	1,302,120	-	-	-	-
34,501 - 35,000	37	1,287,739	1	34,751	1	34,917
35,001 - 35,500	34	1,199,240	-	-	1	35,269
35,501 - 36,000	27	964,431	-	-	-	-
36,001 - 36,500	23	833,499	-	-	-	-
36,501 - 37,000	29	1,066,692	-	-	-	-
37,001 - 37,500	23	856,744	-	-	-	-
37,501 - 38,000	14	528,708	-	-	-	-
38,001 - 38,500	15	573,949	-	-	-	-
38,501 - 39,000	11	425,954	-	-	-	-
39,001 - 39,500	11	431,783	-	-	-	-
39,501 - 40,000	16	634,912	-	-	-	-
Over 40,000	163	7,466,226	1	103,990	3	139,341
Total	6,856	\$ 122,348,396	158	\$ 2,346,930	362	\$ 4,069,891

TABLE 5
 SERVICE PENSIONERS
 AGE/SERVICE DISTRIBUTION WITH AVERAGE ALLOWANCE AS OF JUNE 30, 2012

	Service at termination										Total
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	
< 45	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
50-54	14	0	0	0	0	0	26	1	0	0	41
	29,678	0	0	0	0	0	29,020	43,647	0	0	29,602
55-59	85	14	37	33	39	0	237	7	0	0	452
	25,540	3,911	5,376	8,761	11,858	0	28,652	31,808	0	0	22,543
60-64	224	85	234	173	188	77	652	122	2	0	1,757
	24,445	4,697	6,635	11,247	17,114	24,216	27,509	32,611	41,755	0	20,748
65-69	124	98	331	243	278	153	593	148	23	1	1,992
	20,882	5,394	6,713	11,068	16,498	22,036	25,199	30,352	33,115	33,231	18,181
70-74	28	39	161	173	176	115	271	91	17	0	1,071
	7,267	5,386	6,840	10,389	14,793	18,813	23,707	29,003	29,829	0	16,480
75-79	23	28	102	83	103	78	139	70	16	2	644
	2,341	5,709	6,532	10,389	12,703	16,103	21,743	25,448	29,908	55,616	15,062
80-84	8	24	65	66	70	49	87	57	11	0	437
	1,715	4,296	5,712	8,608	11,812	14,275	19,223	22,423	24,612	0	13,281
85-89	12	15	44	48	38	31	57	25	7	0	277
	4,179	3,637	4,748	7,312	10,391	12,715	18,791	18,321	19,576	0	11,263
90-94	8	13	21	21	20	27	17	7	2	2	138
	2,531	4,314	5,816	7,165	9,848	11,581	13,729	19,863	19,067	21,236	9,504
95+	1	3	7	6	9	4	8	6	2	1	47
	2,392	5,873	7,466	11,870	12,265	16,244	21,302	21,295	23,518	24,996	14,661
Total Pensioners	527	319	1,002	846	921	534	2,087	534	80	6	6,856
Average Allowance	20,864	4,965	6,483	10,313	14,883	18,964	25,404	28,390	29,046	35,322	17,845

TABLE 6
DISABILITY PENSIONERS
AGE/SERVICE DISTRIBUTION WITH AVERAGE ALLOWANCE AS OF JUNE 30, 2012

	Service at termination										Total
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	
< 45	0	2	0	0	0	0	0	0	0	0	2
	0	10,050	0	0	0	0	0	0	0	0	10,050
45-49	0	1	2	0	3	0	0	0	0	0	6
	0	11,394	11,616	0	13,632	0	0	0	0	0	12,587
50-54	1	0	1	1	0	0	0	0	0	0	3
	17,506	0	10,344	10,902	0	0	0	0	0	0	12,917
55-59	1	0	11	10	6	1	0	0	0	0	29
	22,229	0	11,665	13,727	35,552	21,588	0	0	0	0	18,025
60-64	0	8	9	9	10	5	0	0	0	0	41
	0	13,826	10,347	15,434	16,972	20,910	0	0	0	0	15,046
65-69	0	2	9	4	7	9	1	0	0	0	32
	0	10,557	12,837	12,223	13,982	20,420	29,481	0	0	0	15,521
70-74	0	1	4	5	6	3	1	0	0	0	20
	0	18,288	9,461	11,194	13,646	22,353	15,861	0	0	0	13,845
75-79	0	0	0	3	1	3	0	0	0	0	7
	0	0	0	12,699	13,082	12,888	0	0	0	0	12,835
80-84	1	0	1	2	2	3	1	0	0	0	10
	10,984	0	8,517	14,838	7,919	15,396	11,984	0	0	0	12,319
85-89	0	0	2	2	0	1	1	0	0	0	6
	0	0	8,229	10,275	0	18,140	12,198	0	0	0	11,224
90-94	0	0	0	1	1	0	0	0	0	0	2
	0	0	0	11,937	7,055	0	0	0	0	0	9,496
95+	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
Total Pensioners	3	14	39	37	36	25	4	0	0	0	158
Average Allowance	16,906	12,964	11,112	13,303	17,768	19,199	17,381	0	0	0	14,854

SCHEDULE E

AMORTIZATION SCHEDULE FOR THE UNFUNDED ACTUARIAL
ACCRUED LIABILITY

AMORTIZATION SCHEDULE FOR THE UNFUNDED ACTUARIAL
ACCRUED LIABILITY

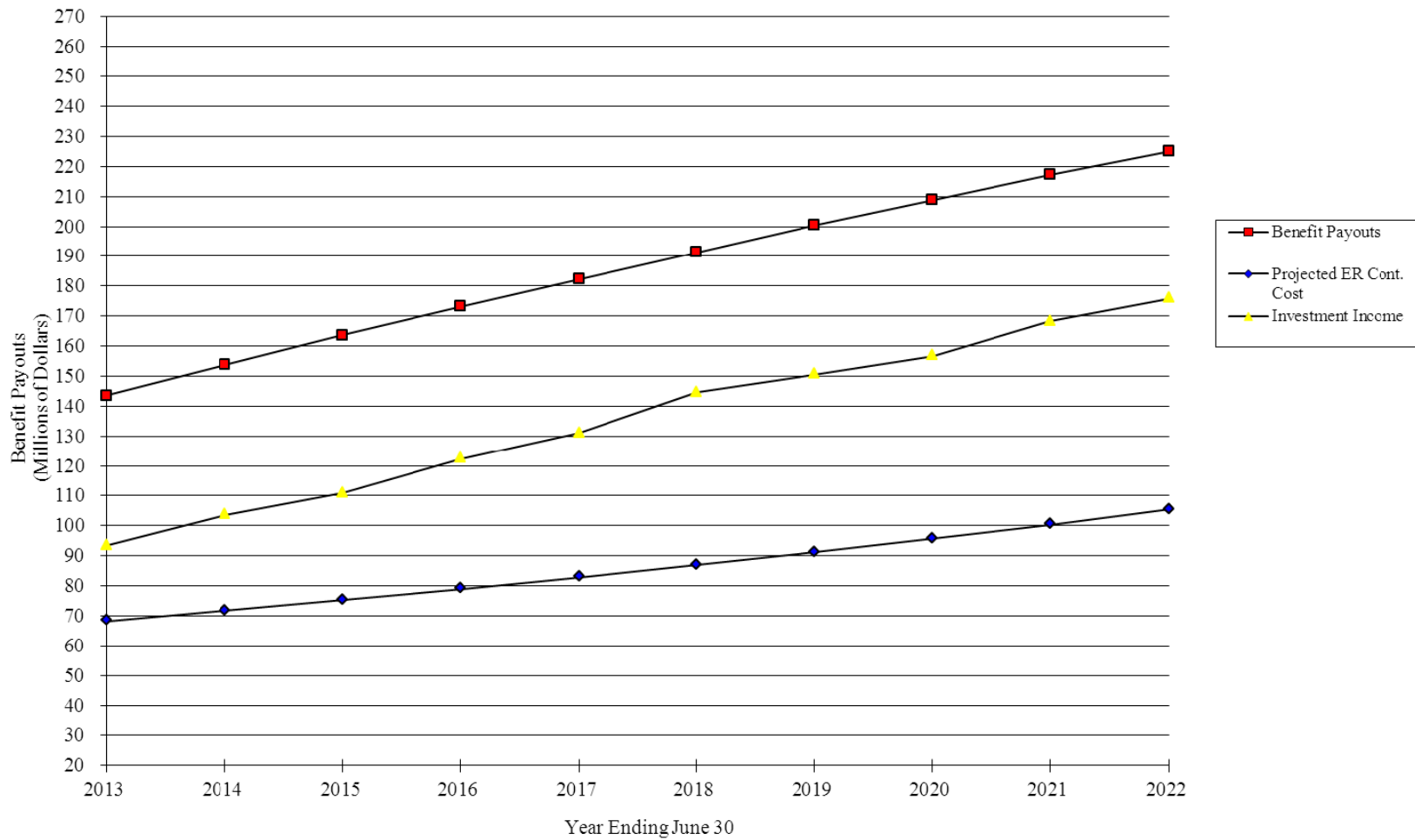
Date	Balance	Contribution (Year Following)
6/30/2012	945,502,316	54,374,595
6/30/2013	950,221,616	57,093,325
6/30/2014	957,268,250	59,947,991
6/30/2015	964,329,037	62,945,391
6/30/2016	973,708,323	66,092,661
6/30/2017	983,078,057	69,397,294
6/30/2018	994,784,703	72,867,159
6/30/2019	1,003,987,282	76,510,517
6/30/2020	1,010,305,716	80,336,043
6/30/2021	1,015,845,659	84,352,845
6/30/2022	1,017,839,695	88,570,487
6/30/2023	1,015,785,582	92,999,011
6/30/2024	1,009,128,345	97,648,962
6/30/2025	997,255,293	102,531,410
6/30/2026	979,490,582	107,657,981
6/30/2027	955,089,301	113,040,880
6/30/2028	925,618,735	118,692,924
6/30/2029	890,231,497	124,627,570
6/30/2030	845,724,762	130,858,949
6/30/2031	790,981,041	137,401,896
6/30/2032	724,767,439	144,271,991
6/30/2033	645,724,517	151,485,591
6/30/2034	552,354,133	159,059,871
6/30/2035	443,006,134	167,012,865
6/30/2036	315,863,821	175,363,508
6/30/2037	168,928,057	184,131,683
6/30/2038	0	0

SCHEDULE F

PROJECTED BENEFIT PAYOUTS AND
CONTRIBUTIONS FOR THE PERIOD
JULY 1, 2012 THROUGH JUNE 30, 2022

PROJECTED BENEFIT PAYOUTS AND CONTRIBUTIONS

JULY 1, 2012 THROUGH JUNE 30, 2022



SCHEDULE G

PROJECTION OF CONTRIBUTIONS FOR FOLLOWING TWO FISCAL YEARS

PROJECTION OF CONTRIBUTIONS FOR FOLLOWING TWO FISCAL YEARS

On the basis of the June 30, 2012, actuarial valuation, the recommended contribution for the fiscal year ending June 30, 2013, is \$65,149,236, based on the following:

Payroll	\$561,179,272
Normal rate	1.92%
Accrued liability contribution	\$54,374,594

On this basis, the projected contributions for the following two fiscal years are as follows:

Fiscal Year	Projected Payroll	Normal Rate	CONTRIBUTIONS		
			Normal	Accrued Liability	Total
2014	\$586,432,339	1.92%	\$11,259,501	\$ 57,093,324	\$ 68,352,825
2015	612,821,794	1.92%	11,766,179	59,947,990	71,714,169

In these projections, we assumed that total payroll would increase by 4½% each year.