## REPORT ON THE SIXTY-SECOND ACTUARIAL VALUATION OF THE STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT PREPARED AS OF JUNE 30, 2009



October 22, 2009

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-second actuarial valuation of the system, prepared as of June 30, 2009, 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 3.89% of covered compensation and a payment of \$38,753,606 towards the liquidation of the unfunded accrued liability be made. Based on the reported payroll, the total contribution amounts to \$60,581,380 for the year beginning July 1, 2009. 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 Dringe

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

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# REPORT ON THE SIXTY-FIRST ACTUARIAL VALUATION OF THE STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT PREPARED AS OF JUNE 30, 2009

## 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, 2008	June 30, 2009
Active members		
Vested	7,902	8,076
Not vested	<u>2,783</u>	<u>2,723</u>
Total	10,685	10,799
Compensation	\$535,807,012	\$561,588,013
Average age	46.89	47.07
Average service	13.62	13.77
Average compensation	\$50,146	\$52,004
Retired members and beneficiaries		
Number	5,555	5,910
Annual retirement allowances	\$82,480,807	\$91,393,401
Inactive members	2,929	2,655
Terminated vested members	705	721
Adjusted assets for valuation	\$1,605,461,728	\$1,374,079,337
Unfunded actuarial accrued liability	\$379,505,069	\$727,758,506
Annual actuarial accrued liability contribution	\$20,649,422	\$38,735,606
Normal contribution rate	3.54%	3.89%

- 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. The actuarial assumptions used in this valuation are identical to those used in the valuation made as of June 30, 2008. Schedule B outlines the full set of actuarial assumptions and methods employed in the current valuation.
- 4. Schedule C outlines the benefit provisions that were taken into account in the valuation. The statutes that define the benefit provisions of the System have not been changed since the prior valuation was completed.
- 5. The statutes governing the operation of the System were amended earlier this year to require the amortization of the System's unfunded liability over a 30-year period beginning July 1, 2008. This change in the amortization period reduced the recommended State contribution for the fiscal year beginning July 1, 2009, by approximately \$1.8 million..
- 6. 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.
- 7. Schedule F shows a graph of projected benefit payments over the next ten years.
- 8. Schedule G shows projected contributions for the two following fiscal years.

#### SECTION II - MEMBER DATA

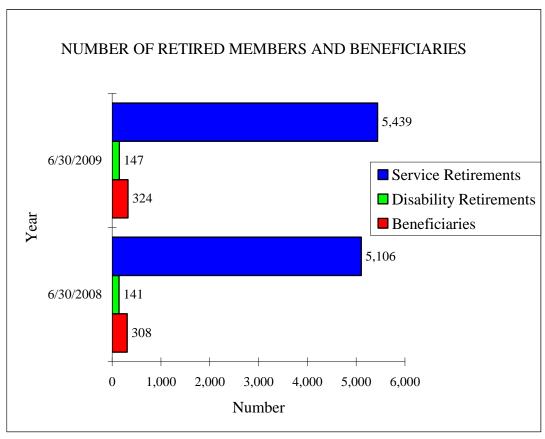
- 1. Member data were furnished by the Retirement Division of the State Treasurer's Office.
- 2. Schedule D presents tables that summarize active members, by age and service and service pensioners, disability pensioners and beneficiaries by annual benefit levels.
- 3. The following tables show a summary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

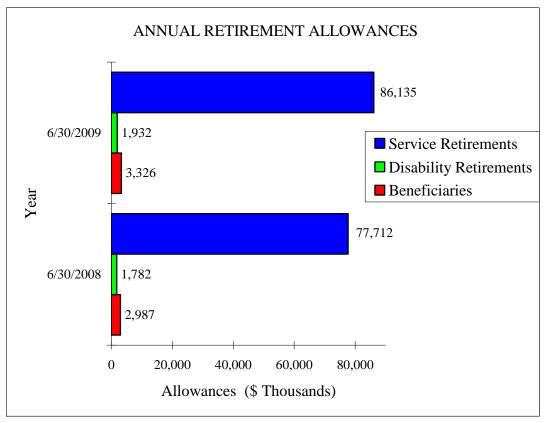
# THE NUMBER AND ANNUAL ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES AS OF JUNE 30, 2009

Group	Number	Annual Allowances
Service Retirements	5,439	\$86,135,252
Disability Retirements	147	\$1,931,996
Beneficiaries of Deceased Members	324	\$3,326,153
TOTAL	5,910	\$91,393,401

# THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF JUNE 30, 2009

Group	Number	Annual Allowances
Group A	24	\$1,476,963
Group C	10,775	\$560,111,050
TOTAL	10,799	\$561,588,013





#### 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 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 8.25% 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, 2008

\$ 1,605,461,728

Cash flow during year (net of investment income)

Contributions paid	\$	60,652,640	
Benefit payouts		91,853,196	
Expenses		22,983,345	
	Net		(5

Net (54,183,901) Expected investment income (8.25%) 135,527,902

Preliminary asset value \$ 1,686,805,729

Market value, June 30, 2009 \$ 1,145,066,114
Preliminary asset value 1,686,805,729
Unrecognized appreciation \$ (541,739,615)

Adjustment X 20% \$ (108,347,923)

Assets for valuation purposes, June 30, 2009

\$ 1,374,079,337

- 3. The assets for valuation purposes are 120.0% of market value. The sum of the preliminary asset value and the adjustment exceeds this amount, but the adjusted asset value is limited by policy to 120% of market value.
- 4. The investment rate of return for the year ending June 30, 2009, is -11.23%, 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, 2009.
- 2. The adjusted assets of the system amount to \$1,374,079,337.
- 3. The actuarial accrued liability for current retired members, terminated vested members and beneficiaries amounts to \$972,834,725, and the actuarial accrued liability for current active and inactive members amounts to \$1,129,003,118, for a total actuarial accrued liability of \$2,101,837,843. Therefore, after subtracting assets of \$1,374,079,337, the unfunded actuarial accrued liability is \$727,758,506.
- 4. The State's contributions consist of a normal contribution and an accrued liability contribution. The accrued liability contribution represents the amount (assumed to increase by 5% each year) necessary to liquidate the unfunded accrued liability as of June 30, 2009, over a 29-year period from that date. 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, 2009, is \$21,845,774, or 3.89% of members' compensation.
- 6. The expected unfunded actuarial accrued liability as of June 30, 2009, 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, 2008:

1. Unfunded liability, 6/30/2008	\$379,505,070
2. Normal cost	35,690,059
3. Contribution	(60,652,640)
4. Interest on 1, 2 and 3	31,801,254
5. Changes in actuarial assumptions	0
6. Changes to system provisions	0
7. Expected unfunded liability, 6/30/2009	386,343,743
8. Accrued liability, 6/30/2009	2,101,837,843
9. Actuarial value of assets, 6/30/2009	1,374,079,337
10. Actual unfunded liability, 8. – 9.	727,758,506
11. Total gain/(loss), 7 10.	(\$341,414,763)

Sources of gain/(loss)	
Investment experience	\$ (312,726,392)
Expenses other than investment expenses	(17,670,950)
Retirement experience	7,834,716
Termination experience	(11,326,626)
Disability experience	(819,381)
Mortality among active participants	(549,044)
Mortality among retirees, beneficiaries	
and terminated vested participants.	1,300,072
Salary experience	(16,569)
COLA experience	(9,112,436)
New entrants with prior service	(1,409,940)
Other (data corrections, purchased service, etc.)	3,081,787
Total	(\$341,414,763)

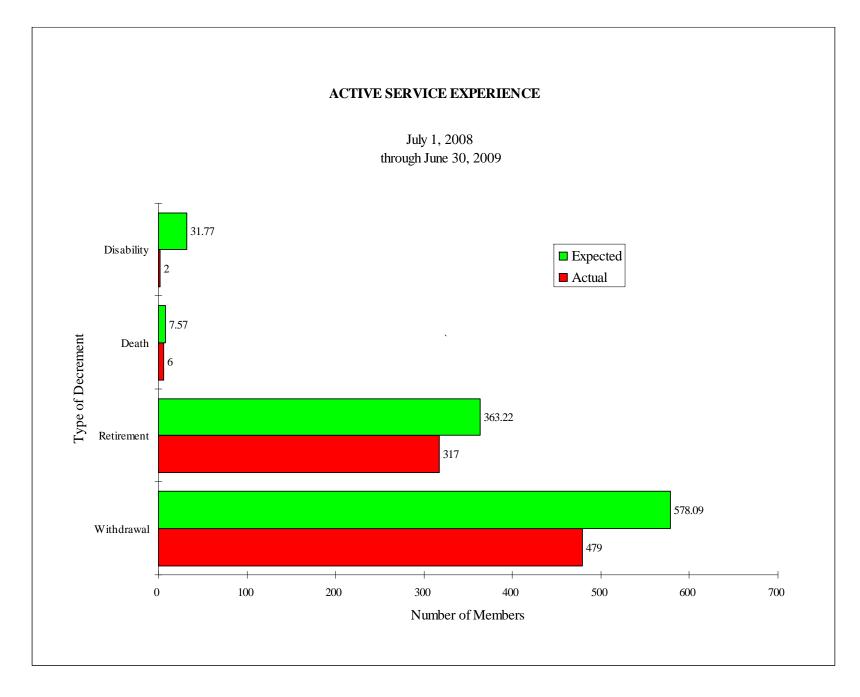
### SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

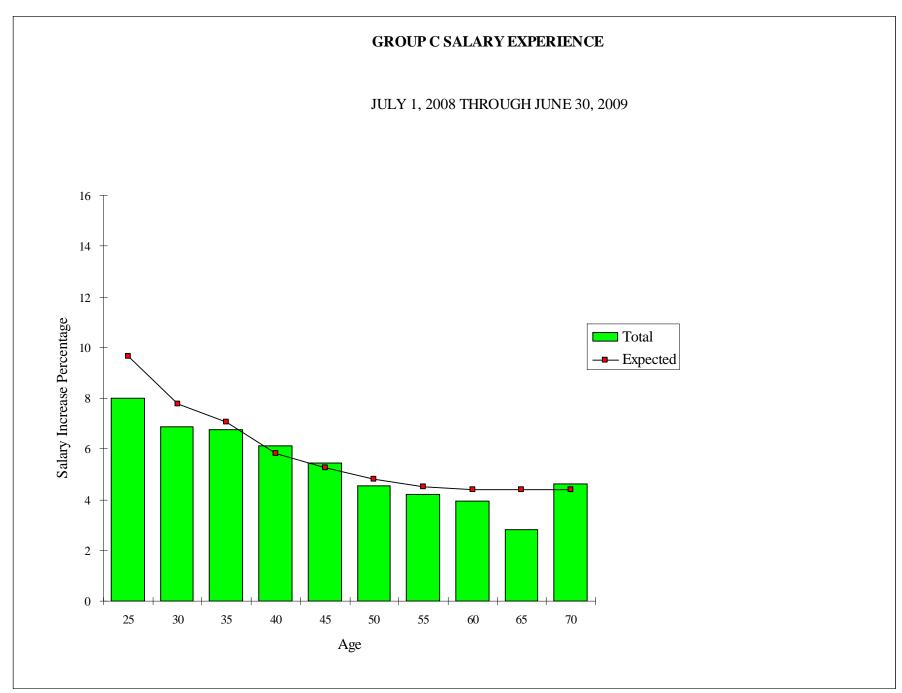
- 1. Section 1942, Subsection (n), of Title 16, Chapter 55, Vermont Statutes Annotated, relating to the State Teachers' Retirement System of Vermont, indicates that the actuary shall submit to the Board of Trustees his recommendation as to the contributions payable by the State based on annual valuations 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, 2009:

Normal contribution	\$21,845,774
Accrued liability contribution	<u>38,735,606</u>
Total	\$60,581,380

### **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.





#### <u>SECTION VII - ACCOUNTING INFORMATION</u>

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)
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 <sup>1</sup>	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	1,424,662	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	84.4%	387,999	35.2%
1999	931,056	1,066,400	135,343	87.3%	372,299	36.4%
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%
1996	570,776	700,377	129,601	81.5%	355,895	36.4%
1995	520,850	648,052	127,202	80.4%	346,975	36.7%
1994	473,229	597,851	124,622	79.2%	335,155	37.2%

<sup>&</sup>lt;sup>1</sup>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.

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	Annual					Change in	
Ending	Required	Interest on	Amortization	Pension Cost	Actual	NPO	NPO
June 30	Contribution	NPO	of NPO	(1)+(2)-(3)	Contribution	(4)-(5)	Balance
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1994	25,805,408	2,772,593	2,970,742	25,607,259	20,580,000	5,027,259	37,646,002
1995	27,451,926	3,199,910	3,544,821	27,107,015	18,080,000	9,027,015	46,673,017
1996	28,711,597	3,967,206	4,374,228	28,304,575	11,480,000	16,824,575	63,497,592
1997	30,721,768	5,397,295	6,111,414	30,007,649	18,080,000	11,927,649	75,425,241
1998	26,927,205	6,411,145	6,285,437	27,052,913	18,106,581	8,946,332	84,371,573
1999	20,723,874	7,171,584	8,231,373	19,664,085	18,080,000	1,584,085	85,955,658
2000	19,936,345	7,306,231	8,385,918	18,856,658	18,586,240	270,418	86,226,076
2001	20,970,278	7,329,216	8,412,300	19,887,194	19,143,827	743,367	86,969,443
2002	22,146,880	7,392,403	8,484,824	21,054,459	20,446,282	608,177	87,577,620
2003	28,279,810	7,444,098	8,012,591	27,711,317	20,446,282	7,265,035	94,842,655
2004	41,658,946	7,587,412	8,677,279	40,569,079	24,446,282	16,122,797	110,965,452
2005	47,714,318	8,877,326	9,828,765	46,762,879	24,446,282	22,316,507	133,282,049
2006	56,627,046	10,662,467	11,805,450	55,484,063	24,985,506	30,498,557	163,780,606
2007	38,929,729	13,511,900	8,536,948	43,904,682	38,496,410	5,408,272	169,188,878
2008	41,204,051	13,958,082	9,005,231	46,156,902	40,955,566	5,201,336	174,390,213
2009	39,616,990	14,387,193	9,488,825	44,515,358	37,349,818	7,165,540	181,555,753

3. The Annual Required Contribution for fiscal year 2009 is derived as follows:

\$18,967,568 Product of the normal rate from the 2008 valuation report (3.54%) and payroll (\$535,807,012)

\$20,649,422 Amortization of unfunded liability (see amortization chart in 2008 valuation report)

\$39,616,990

## SCHEDULE A

VALUATION BALANCE SHEET SHOWING THE ASSETS AND LIABILITIES OF THE STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT PREPARED AS OF JUNE 30, 2009

#### VALUATION BALANCE SHEET SHOWING THE ASSETS AND LIABILITIES OF THE STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT PREPARED AS OF JUNE 30, 2009

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А	SS	E.	L O

Adjusted assets of the system

\$1,374,079,337

Present value of prospective contributions

Members \$125,744,397

State

Accrued liability contributions 727,758,506 Normal contributions 147,221,171

Total prospective contributions <u>\$ 1,000,724,074</u>

Total assets <u>\$2,374,803,411</u>

#### LIABILITIES

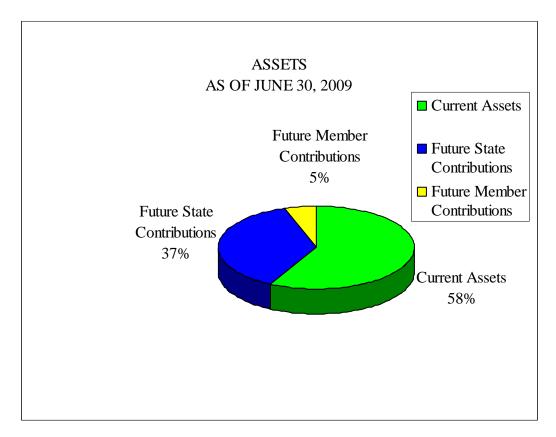
Actuarial present value of benefits payable on account of present retired members, terminated vested members and beneficiaries

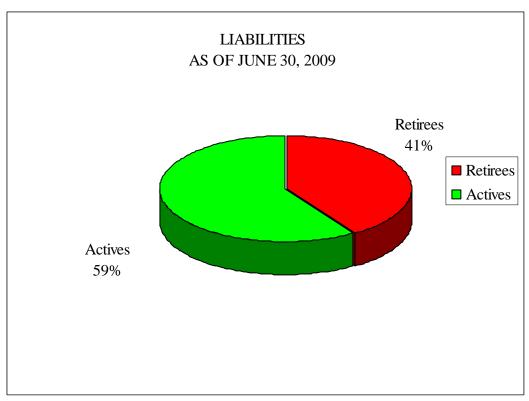
\$ 972,834,725

Actuarial present value of benefits expected to become payable on account of active and

inactive members  $\underline{1,401,968,686}$ 

Total liabilities <u>\$2,374,803,411</u>





## SCHEDULE B

# OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

### OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 8.25% per annum, compounded annually.

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

	Withdrawal and Vested Retirement		Disability		De	eath
Age	Males	Females	Males	Females	Males	Females
25	20.00%	20.00%	.010%	.015%	.02%	.02%
30	12.00	14.00	.015	.015	.02	.02
35	8.00	11.30	.020	.015	.02	.02
40	6.50	8.60	.030	.020	.05	.02
45	5.80	6.00	.053	.045	.05	.04
50	5.40	5.00	.180	.180	.07	.06
55	5.40	4.84	.440	.390	.07	.10
59	5.40	4.84	1.170	.710	.09	.14
60	5.40	4.84	1.470	.840	.09	.15
61	5.40	4.84	1.830	1.010	.297	.17

	Reduced Earl	y Retirement	Full Early Retirement						
Age	Males	Females	Males	Females					
50	-	-	40.00%	40.00%					
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	30.00					
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:

	Annual Rate of Retirement										
Age	Male	Female									
62	25.0%	25.0%									
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
25	10.68%
30	8.10
35	7.30
40	6.03
45	5.49
50	4.95
55	4.59
60	4.41
64	4.41

DEATHS AFTER RETIREMENT: The 1995 Buck Mortality Tables, set back one year, are used for the period after service retirement, while the RP-2000 Tables for Disabled Retirees are used for the period following disability retirement.

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.

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.

SPOUSE'S AGE: Husbands are assumed to be 3 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).

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.

INACTIVE MEMBERS: A liability equal to 300% of accumulated contributions of inactive members is included in the valuation liabilities.

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.

GROUP A GROUP C

Service Retirement Allowance

Eligibility Age 60 or 30 years of Age 62 or 30 years of

creditable service. creditable service.

Amount of Allowance Member annuity based Member annuity

on accumulated

contributions plus a pension which, with member annuity, equals 1/60 of AFC times

creditable service.

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.

Minimum \$6,600 after 30 years of N/A

creditable service (pro-rata portion if less than 30 years).

Maximum None 50% of AFC.

Early Retirement Allowance

Eligibility Age 55. Age 55 and 5 years of

creditable service.

Amount of Allowance Actuarial equivalent of Accrued normal

Actuarial equivalent of service allowance using AFC and creditable service at

early retirement.

Accrued normal benefit reduced 6% for each year under age 62. No reduction if credited service is 30 years

or more.

<u>GROUP C</u>

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).
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.

<u>GROUP A</u>

Normal and accrued liability

contributions actuarially

system financially sound.

determined to keep the

	GROUP A	GROUP C
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.
Post-retirement Adjustments	On each December 31 allowances in payment for at least one year are adjusted for cost of living 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 based on one-half of 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	3.4% of earnable compensation.

creditable service.

State

Normal and accrued liability

contributions actuarially

system financially sound.

determined to keep the

# SCHEDULE D

SUMMARY TABLES OF MEMBER DATA AS OF JUNE 30, 2009  $\,$ 

TABLE 1
THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE AS OF JUNE 30, 2009

	- (	) to 4	5	to 9	10	to 14	15	to 19	20	to 24	25	to 29	30	0 to 34	35	to 39	40	) & ир	7	Total
AGE	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary
Under 20	1	5,931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5,931
20 to 24	129	4,012,760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129	4,012,760
25 to 29	583	21,208,404	129	5,470,258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	712	26,678,662
30 to 34	524	20,107,410	463	20,851,734	101	4,850,513	0	0	0	0	0	0	0	0	0	0	0	0	1,088	45,809,657
35 to 39	378	14,953,465	453	20,977,609	399	21,232,397	57	3,333,185	0	0	0	0	0	0	0	0	0	0	1,287	60,496,656
40 to 44	338	13,766,472	285	13,714,094	298	16,288,843	227	13,195,722	64	3,993,799	0	0	0	0	0	0	0	0	1,212	60,958,930
45 to 49	263	10,909,540	275	14,008,985	268	14,779,958	226	13,499,294	267	16,134,807	61	3,871,105	0	0	0	0	0	0	1,360	73,203,689
50 to 54	233	9,237,235	298	14,617,121	271	14,787,327	240	14,200,001	300	18,712,836	292	18,861,573	84	5,752,747	0	0	0	0	1,718	96,168,840
55 to 59	173	7,796,792	240	11,759,367	315	16,817,150	317	18,308,432	326	19,931,023	343	22,186,534	311	20,589,680	86	5,667,473	0	0	2,111	123,056,451
60 to 64	83	3,880,805	93	4,718,452	112	6,432,537	143	8,656,839	209	12,950,655	134	8,934,037	116	7,677,663	129	8,622,349	9	667,194	1,028	62,540,531
65 to 69	14	549,633	25	1,271,173	12	667,233	14	801,641	18	1,196,577	14	866,523	12	853,607	17	1,128,736	6	364,700	132	7,699,823
70 & up	4	88,345	6	219,767	3	119,588	1	58,947	1	60,683	1	87,452	0	0	4	243,402	1	77,899	21	956,083
TOTAL	2,723	106,516,792	2,267	107,608,560	1,779	95,975,546	1,225	72,054,061	1,185	72,980,380	845	54,807,224	523	34,873,697	236	15,661,960	16	1,109,793	10,799	561,588,013

# TABLE 2 THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE AS OF JUNE 30, 2009

#### GROUP A

	0 t	o 4	5	to 9	10	to 14	15	to 19	20	to 24	25	to 29	30	to 34	35	to 39	40	& ир	Т	otal
AGE	No.	Salary	No.	Salary	No.	Salary	No.	Salary		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	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
30 to 34	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
40 to 44	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
50 to 54	0	0	0	0	0	0	1	50,685	2	126,799	4	243,170	1	72,974	0	0	0	0	8	493,628
55 to 59	0	0	0	0	0	0	0	0	0	0	5	235,758	4	258,965	0	0	0	0	9	494,723
60 to 64	0	0	0	0	0	0	0	0	0	0	2	140,067	2	134,595	3	213,950	0	0	7	488,612
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	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	1	50,685	2	126,799	11	618,995	7	466,534	3	213,950	0	0	24	1,476,963

# TABLE 3 THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE AS OF JUNE 30, 2009

#### GROUP C

	0	to 4	5	to 9	10	to 14	15	to 19	20	to 24	25	to 29	3/	0 to 34	34	i to 39	40	) & up	7	otal
AGE	No.	Salary	No.	Salary		Salary	No.	Salary	No.	Salary	No.	Salary		Salary	No.	Salary		Salary		Salary
Under 20	1	5,931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5,931
20 to 24	129	4,012,760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129	4,012,760
25 to 29	583	21,208,404	129	5,470,258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	712	26,678,662
30 to 34	524	20,107,410	463	20,851,734	101	4,850,513	0	0	0	0	0	0	0	0	0	0	0	0	1,088	45,809,657
35 to 39	378	14,953,465	453	20,977,609	399	21,232,397	57	3,333,185	0	0	0	0	0	0	0	0	0	0	1,287	60,496,656
40 to 44	338	13,766,472	285	13,714,094	298	16,288,843	227	13,195,722	64	3,993,799	0	0	0	0	0	0	0	0	1,212	60,958,930
45 to 49	263	10,909,540	275	14,008,985	268	14,779,958	226	13,499,294	267	16,134,807	61	3,871,105	0	0	0	0	0	0	1,360	73,203,689
50 to 54	233	9,237,235	298	14,617,121	271	14,787,327	239	14,149,316	298	18,586,037	288	18,618,403	83	5,679,773	0	0	0	0	1,710	95,675,212
55 to 59	173	7,796,792	240	11,759,367	315	16,817,150	317	18,308,432	326	19,931,023	338	21,950,776	307	20,330,715	86	5,667,473	0	0	2,102	122,561,728
60 to 64	83	3,880,805	93	4,718,452	112	6,432,537	143	8,656,839	209	12,950,655	132	8,793,970	114	7,543,068	126	8,408,399	9	667,194	1,021	62,051,919
65 to 69	14	549,633	25	1,271,173	12	667,233	14	801,641	18	1,196,577	14	866,523	12	853,607	17	1,128,736	6	364,700	132	7,699,823
70 & up	4	88,345	6	219,767	3	119,588	1	58,947	1	60,683	1	87,452	0	0	4	243,402	1	77,899	21	956,083
TOTAL	2,723	106,516,792	2,267	107,608,560	1,779	95,975,546	1,224	72,003,376	1,183	72,853,581	834	54,188,229	516	34,407,163	233	15,448,010	16	1,109,793	10,775	560,111,050

TABLE 4

SUMMARY OF RETIRED MEMBER AND BENEFICIARY DATA BY LEVEL OF ANNUAL ALLOWANCE AS OF JUNE 30, 2009

#### ALL TEACHERS

	Service	Pensioners	Disability	Pensioners	Beneficiaries				
		Annual		Annual	Annual				
Allowance Level	Number	Allowance	Number	Allowance	Number	Allowance			
0 - 500	7	\$ 2,377	-	\$ -	-	\$ -			
501 - 1,000	15	11,438	-	-	1	630			
1,001 - 1,500	26	33,548	-	-	4	5,509			
1,501 - 2,000	43	76,619	-	-	5	9,129			
2,001 - 2,500	85	191,532	-	-	5	10,882			
2,501 - 3,000	110	303,009	-	-	8	22,565			
3,001 - 3,500	99	323,691	-	-	11	35,589			
3,501 - 4,000	131	494,760	-	-	19	70,706			
4,001 - 4,500	128	542,986	-	-	9	38,460			
4,501 - 5,000	128	610,749	1	4,667	11	52,520			
5,001 - 5,500	119	623,987	-	-	10	53,686			
5,501 - 6,000	99	570,952	-	-	11	63,151			
6,001 - 6,500	122	761,806	3	18,866	17	105,812			
6,501 - 7,000	122	819,264	2	13,475	14	94,958			
7,001 - 7,500	102	738,462	4	29,307	5	36,674			
7,501 - 8,000	95	736,509	3	22,740	10	77,049			
8,001 - 8,500	96	792,981	7	58,113	12	97,836			
8,501 - 9,000	123	1,075,679	4	35,044	15	131,509			
9,001 - 9,500	85	787,479	11	101,768	9	83,023			
9,501 - 10,000	105	1,021,304	8	77,862	13	125,874			
10,001 - 10,500	94	961,473	9	92,971	6	61,417			
10,501 - 11,000	100	1,074,518	5	53,909	8	86,470			
11,001 - 11,500	88	988,907	9	100,626	12	134,606			
11,501 - 12,000	77	904,588	5	59,105	9	106,045			
12,001 - 12,500	88	1,079,015	6	74,319	14	171,365			
12,501 - 13,000	80	1,020,047	9	115,202	6	75,983			
13,001 - 13,500	83	1,100,059	7	93,196	4	53,140			
13,501 - 14,000	74	1,018,110	5	68,550	1	13,822			
14,001 - 14,500	74	1,055,323	6	85,681	8	114,437			
14,501 - 15,000	90	1,330,115	3	44,461	6	88,996			
15,001 - 15,500	70	1,068,322	1	15,323	1	15,179			
15,501 - 16,000	62	976,384	4	63,140	6	94,093			
16,001 - 16,500	93	1,510,995	2	32,630	5	81,295			
16,501 - 17,000	73	1,220,871	2	33,391	7	117,855			
17,001 - 17,500	89	1,533,283	4	68,766	6	103,888			
17,501 - 18,000	79	1,400,188	3	53,133	3	53,063			
18,001 - 18,500	98	1,789,516	2	36,365	2	36,536			
18,501 - 19,000	88	1,650,303	5	93,725	3	55,932			
19,001 - 19,500	93	1,793,141	2	38,426	2	38,285			
19,501 - 20,000	106	2,093,813	-	-	3	59,275			
20,001 - 20,500	101	2,042,980	3	60,417	1	20,134			
20,501 - 21,000	118	2,449,755	4	83,126	-	-			

TABLE 4, continued

# SUMMARY OF RETIRED MEMBER AND BENEFICIARY DATA BY LEVEL OF ANNUAL ALLOWANCE AS OF JUNE 30, 2009

#### ALL TEACHERS

	Service	Pensioners	Disability	Pensioners	Beneficiaries			
		Annual		Annual		Annual		
Allowance Level	Number	Allowance	Number	Allowance	Number	Allowance		
21,001 - 21,500	113	2,402,763	2	42,609	3	63,596		
21,501 - 22,000	108	2,347,633	-	-	3	65,103		
22,001 - 22,500	113	2,510,625	1	22,391	1	22,078		
22,501 - 23,000	91	2,071,315	1	22,644	-	-		
23,001 - 23,500	93	2,162,257	-	-	1	23,061		
23,501 - 24,000	91	2,161,326	-	-	1	23,785		
24,001 - 24,500	67	1,626,400	-	-	1	24,205		
24,501 - 25,000	79	1,955,433	-	-	-	-		
25,001 - 25,500	80	2,020,127	-	-	-	-		
25,501 - 26,000	78	2,007,368	-	-	1	25,905		
26,001 - 26,500	69	1,811,627	-	-	-	-		
26,501 - 27,000	58	1,551,491	1	26,930	1	26,687		
27,001 - 27,500	62	1,688,364	-	-	1	27,102		
27,501 - 28,000	58	1,609,040	-	-	1	27,707		
28,001 - 28,500	43	1,215,943	-	-	-	-		
28,501 - 29,000	37	1,064,050	1	28,701	-	-		
29,001 - 29,500	41	1,199,046	1	29,451	-	-		
29,501 - 30,000	34	1,012,944	-	-	-	-		
30,001 - 30,500	30	907,665	-	-	1	30,488		
30,501 - 31,000	34	1,047,181	1	30,966	-	-		
31,001 - 31,500	32	1,001,102	-	-	-	-		
31,501 - 32,000	20	634,926	-	-	1	31,741		
32,001 - 32,500	25	805,165	-	-	-	-		
32,501 - 33,000	23	753,459	-	-	1	32,918		
33,001 - 33,500	14	465,518	-	-	-	-		
33,501 - 34,000	14	473,275	-	-	-	-		
34,001 - 34,500	12	411,849	-	-	2	68,674		
34,501 - 35,000	14	487,037	-	-	-	-		
35,001 - 35,500	10	351,708	-	-	-	-		
35,501 - 36,000	14	500,985	-	-	-	-		
36,001 - 36,500	7	253,825	-	-	-	-		
36,501 - 37,000	7	257,322	-	-	-	-		
37,001 - 37,500	7	261,030	-	-	-	-		
37,501 - 38,000	7	264,013	-	-	-	-		
38,001 - 38,500	3	115,037	-	-	-	-		
38,501 - 39,000	9	348,421	-	-	-	-		
39,001 - 39,500	3	117,914	-	-	-	-		
39,501 - 40,000	4	158,267	-	-	-	-		
Over 40,000	77	3,520,963	-	-	3	135,725		
Total	5,439	\$ 86,135,252	147	\$ 1,931,996	324	\$ 3,326,153		

TABLE 5

SERVICE PENSIONERS

AGE/SERVICE DISTRIBUTION WITH AVERAGE ALLOWANCE AS OF JUNE 30, 2009

					;	Service at ter	mination					
		<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	Total
	< 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	5	0	0	0	0	0	42	0	0	0	47
		6,998	0	0	0	0	0	26,337	0	0	0	24,279
	55-59	9	14	57	38	49	2	297	5	1	0	472
		7,998	3,691	5,835	8,034	11,305	13,485	26,286	29,168	47,684	0	19,794
	60-64	8	71	237	158	178	57	606	64	5	0	1,384
		4,969	4,643	5,772	9,631	14,500	18,622	25,355	29,174	35,251	0	17,565
Age	65-69	25	48	215	193	199	117	410	103	16	0	1,326
peq '		3,913	5,284	6,552	10,036	14,282	18,175	23,240	28,400	30,295	0	16,292
Attained Age	70-74	20	28	116	117	139	89	168	77	12	1	767
<b>₹</b>		2,889	5,231	6,493	10,339	13,266	18,039	22,582	27,106	32,052	43,440	15,548
	75-79	15	28	86	79	84	81	120	79	12	1	585
		3,680	4,776	5,783	9,125	12,128	14,315	19,579	22,983	24,351	64,474	13,858
	80-84	11	20	63	71	69	41	86	39	17	0	417
		5,863	3,559	4,922	7,376	10,002	12,862	17,836	19,253	22,231	0	11,630
	85-89	17	22	36	43	46	41	47	18	6	3	279
		2,902	3,416	5,008	6,934	9,568	11,238	15,889	16,654	17,853	21,079	9,752
	90-94	3	5	17	13	15	15	17	11	1	2	99
		1,959	4,632	6,165	7,550	10,490	14,133	18,233	20,129	19,258	18,210	12,004
	95+	2	6	6	9	12	7	2	10	9	0	63
		7,029	5,279	7,945	11,328	14,991	17,410	19,298	20,547	22,791	0	15,021
	Total Pensioners	115	242	833	721	791	450	1,795	406	79	7	5,439
	Average Allowance	4,272	4,613	6,005	9,315	13,031	16,226	23,721	25,415	26,518	29,653	15,837

DISABILITY PENSIONERS
AGE/SERVICE DISTRIBUTION WITH AVERAGE ALLOWANCE AS OF JUNE 30, 2009

					;	Service at ter	mination					
		<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	Total
	< 45	0	2	1	0	1	0	0	0	0	0	4
		0	9,837	11,688	0	12,859	0	0	0	0	0	11,055
	45-49	0	0	2	0	0	0	0	0	0	0	2
		0	0	9,315	0	0	0	0	0	0	0	9,315
	50-54	0	0	4	2	1	0	0	0	0	0	7
		0	0	10,583	8,196	18,669	0	0	0	0	0	11,056
	55-59	0	4	10	9	4	4	0	0	0	0	31
		0	10,695	10,372	13,533	16,473	20,311	0	0	0	0	13,401
	60-64	0	2	8	7	10	6	1	0	0	0	34
		0	11,395	10,828	14,880	15,608	20,452	28,701	0	0	0	15,326
Age	65-69	0	1	9	7	6	6	0	0	0	0	29
Attained Age		0	17,984	11,919	11,122	14,276	18,857	0	0	0	0	13,859
Åttai	70-74	0	0	2	3	4	3	0	0	0	0	12
7		0	0	11,482	10,338	9,616	17,990	0	0	0	0	12,201
	75-79	1	0	2	4	4	3	0	0	0	0	14
		10,801	0	7,886	13,605	8,107	14,264	0	0	0	0	11,158
	80-84	0	0	2	1	0	2	2	0	0	0	7
		0	0	6,520	11,881	0	16,451	11,890	0	0	0	11,658
	85-89	0	0	1	1	1	1	0	1	0	0	5
		0	0	8,389	7,531	4,667	15,788	0	13,457	0	0	9,966
	90-94	0	0	1	1	0	0	0	0	0	0	2
		0	0	8,261	11,028	0	0	0	0	0	0	9,645
	95+	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
	Γotal Pensioners	1	9	42	35	31	25	3	1	0	0	147
A	Average Allowance	10,801	11,470	10,445	12,459	13,378	18,502	17,494	13,457	0	0	13,143

# SCHEDULE E

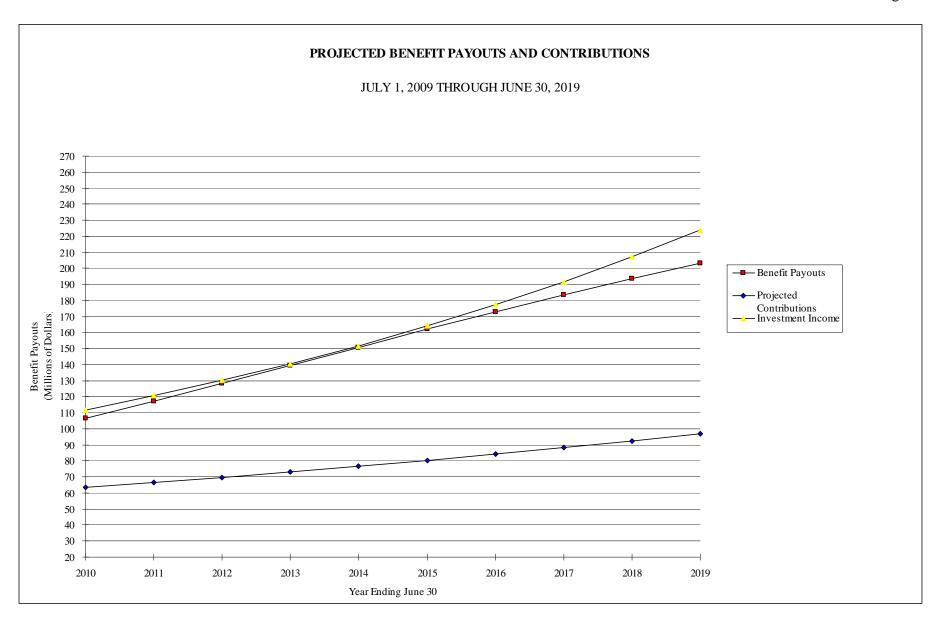
# AMORTIZATION SCHEDULE FOR THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

# AMORTIZATION SCHEDULE FOR THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

		Contribution	
Date	Balance	(Year Following)	
6/30/2009	727,758,506	38,735,606	
6/30/2010	747,496,796	40,672,386	
6/30/2011	766,848,405	42,706,005	
6/30/2012	785,680,679	44,841,305	
6/30/2013	803,844,979	47,083,370	
6/30/2014	821,175,117	49,437,539	
6/30/2015	837,485,637	51,909,416	
6/30/2016	852,569,953	54,504,887	
6/30/2017	866,198,312	57,230,131	
6/30/2018	878,115,579	60,091,638	
6/30/2019	888,038,815	63,096,220	
6/30/2020	895,654,653	66,251,031	
6/30/2021	900,616,429	69,563,583	
6/30/2022	902,541,065	73,041,762	
6/30/2023	901,005,672	76,693,850	
6/30/2024	895,543,858	80,528,543	
6/30/2025	885,641,705	84,554,970	
6/30/2026	870,733,398	88,782,719	
6/30/2027	850,196,468	93,221,855	
6/30/2028	823,346,620	97,882,948	
6/30/2029	789,432,105	102,777,095	
6/30/2030	747,627,614	107,915,950	
6/30/2031	697,027,619	113,311,748	
6/30/2032	636,639,161	118,977,335	
6/30/2033	565,373,993	124,926,202	
6/30/2034	482,040,054	131,172,512	
6/30/2035	385,332,201	137,731,177	
6/30/2036	273,822,101	144,617,736	
6/30/2037	145,947,416	151,848,623	
6/30/2038	0	0	

## SCHEDULE F

PROJECTED BENEFIT PAYOUTS AND CONTRIBUTIONS FOR THE PERIOD JULY 1, 2009 THROUGH JUNE 30, 2019



## 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, 2009, actuarial valuation, the recommended contribution for the fiscal year ending June 30, 2010, is \$60,581,380, based on the following:

Payroll \$561,588,013 Normal rate 3.89% Accrued liability contribution \$38,735,606

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

			CONTRIBUTIONS		
Fiscal				Accrued	
Year	Projected Payroll	Normal Rate	Normal	Liability	Total
2011	\$586,859,474	3.89%	\$22,828,834	\$40,672,386	\$63,501,220
2012	\$613,268,150	3.89%	\$23,856,131	\$42,706,005	\$66,562,136

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