

**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**ACTUARIAL VALUATION REPORT**  
**AS OF JUNE 30, 2008**

October 31, 2008

Board of Trustees  
New Hampshire Retirement System  
54 Regional Drive  
Concord, New Hampshire 03301-8509

**Re: New Hampshire Retirement System Actuarial Valuation as of June 30, 2008**

Dear Board Members:

The results of the June 30, 2008 Annual Actuarial Valuation of the New Hampshire Retirement System (NHRS) are presented in this report. The purpose of the valuation was to measure the System's funding progress and to estimate the employer contribution rate for Fiscal Years 2012 and 2013. The final employer rates will be computed in the June 30, 2009 actuarial valuation.

The valuation was based upon information, furnished by NHRS staff, concerning Retirement System benefits, financial transactions, and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data.

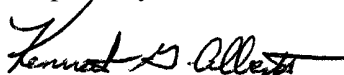
The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. We believe that the assumptions and methods used in this report are reasonable and appropriate for the purpose for which they have been used. However, other assumptions and methods could also be reasonable and could result in materially different results. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are deemed to be immaterial.

If there is other information that you need in order to make an informed decision regarding the matters discussed in this report, please contact us.

We certify that the information contained in this report is accurate and fairly presents the actuarial position of the New Hampshire Retirement System as of June 30, 2008. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

The undersigned actuaries are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

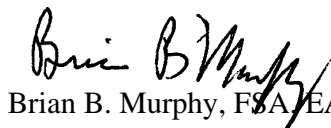
Respectfully submitted,



Kenneth G. Alberts



David T. Kausch, FSA, EA, MAAA



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**SECTION A**  
INTRODUCTION

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## Executive Summary

Covered Group	Employees	Teachers	Police	Fire	Total
<b>I. Number of Participants as of June 30, 2008</b>					
a. Actives	26,507	18,509	4,332	1,640	50,988
b. Retirees, Disabilities, and Beneficiaries	11,580	7,654	2,436	1,200	22,870
c. Vested Terminations	749	603	60	11	1,423
d. Total	38,836	26,766	6,828	2,851	75,281
e. Total Covered Annual Payroll	\$1,010,031,606	\$957,067,895	\$244,314,171	\$96,906,997	\$2,308,320,669
<b>II. Long Range Pension Cost</b>					
a. Actuarial Present Value of Projected Benefits	\$3,357,180,596	\$3,826,682,802	\$1,773,319,146	\$902,716,425	\$9,859,898,969
b. Actuarial Present Value of Future Normal Costs	814,621,433	667,382,698	346,938,246	209,640,240	2,038,582,617
c. Actuarial Accrued Liability (AAL): a. – b.	2,542,559,163	3,159,300,104	1,426,380,900	693,076,185	7,821,316,352
d. Valuation Assets	1,696,188,535	2,114,542,745	1,014,088,352	477,214,374	5,302,034,006
e. Unfunded Actuarial Accrued Liability (UAAL): c. – d.	846,370,628	1,044,757,359	412,292,548	215,861,811	2,519,282,346
f. Funded Status	66.7%	66.9%	71.1%	68.9%	67.8%
<b>III. Current Cost</b>					
Total Normal Cost (% of Covered Payroll)	9.67%	8.65%	17.62%	20.70%	10.58%
Member Contributions (% of Payroll)	5.00%	5.00%	9.30%	9.30%	5.64%
Employer Normal Cost (% of Payroll)	4.67%	3.65%	8.32%	11.40%	4.94%
UAAL Contribution (% of Payroll)	4.65%	6.02%	9.24%	12.31%	6.03%
Employer Pension Contribution (% of Payroll)	9.32%	9.67%	17.56%	23.71%	10.97%
Employer Health Contribution (% of Payroll)	3.11%*	1.67%	2.60%	2.60%	1.72%
<b>Total Contributions for Fiscal Year 2012</b>					
1. Percent of Payroll	12.43%*	11.34%	20.16%	26.31%	12.69%
2. Estimated Dollar Amount	\$130,027,651	\$123,852,470	\$56,206,696	\$29,095,435	\$339,182,252
<b>Total Contributions for Fiscal Year 2013</b>					
1. Percent of Payroll	12.43%*	11.34%	20.16%	26.31%	12.69%
2. Estimated Dollar Amount	\$135,878,896	\$129,425,832	\$58,735,997	\$30,404,730	\$354,445,455

\* Political Subdivision Employees Health Contribution is 0.02%, Political Subdivision Employees FY2012 and FY2013 total contribution rate is 9.34%.

## Executive Summary (Continued)

<b>Covered Group</b>	<b>State Employees</b>	<b>Political Subdivision Employees</b>	<b>Teachers</b>	<b>Police and Fire</b>	<b>Grand Total</b>
<b>I. Number of Participants Covered by Post Retirement Health as of June 30, 2008</b>					
a. Actives	0	1,530 *	4,374 *	5,972	11,876
b. Retirees, Disabilities, and Beneficiaries	2,327	1,167	3,690	2,400	9,584
c. Vested Terminations	0	0	0	70	70
d. Total	2,327	2,697	8,064	8,442	21,530
e. Total NHRS Covered Annual Payroll	\$ 475,702,597	\$ 534,329,009	\$ 957,067,895	\$ 341,221,168	\$ 2,308,320,669
<b>II. Long Range Post-Retirement Health Cost</b>					
a. Actuarial Present Value of Projected Benefits	\$ 95,935,658	\$ 62,809,953	\$ 248,754,425	\$ 313,944,976	\$ 721,445,012
b. Actuarial Present Value of Future Normal Costs	-	713,098	2,138,362	48,718,732	51,570,192
c. Actuarial Accrued Liability (AAL): a. – b.	95,935,658	62,096,855	246,616,063	265,226,244	669,874,820
d. Valuation Assets	(17,245,835)	50,250,480	22,649,523	119,532,558	175,186,726
e. Unfunded Actuarial Accrued Liability (UAAL): c. – d.	113,181,493	11,846,375	223,966,540	145,693,686	494,688,094
f. Funded Status	0.0%	80.9%	9.2%	45.1%	26.2%
<b>III. Health Contributions</b>					
<b>For Fiscal Year 2012</b>					
1. Percent of Payroll	3.11%	0.02%	1.67%	2.60%	1.72%
2. Estimated Dollar Amount	\$ 16,882,812	\$ 121,952	\$ 18,239,297	\$ 10,124,141	\$ 45,368,202
<b>For Fiscal Year 2013</b>					
1. Percent of Payroll	3.11%	0.02%	1.67%	2.60%	1.72%
2. Estimated Dollar Amount	\$ 17,642,538	\$ 127,439	\$ 19,060,065	\$ 10,579,727	\$ 47,409,769

\* Must retire by July 1, 2009.

## Discussion

### Actuarial Valuation

This is the actuarial valuation of the New Hampshire Retirement System, prepared as of June 30, 2008. Valuations are prepared biennially, as of June 30 on the odd numbered years (2007, 2009, etc.). The June 30, 2008 is an interim valuation that estimates the contribution rate for Fiscal Years 2012 and 2013. Ultimately, the June 30, 2009 actuarial valuation will establish the FY 2012 and FY 2013 contribution rates.

The primary purposes of the valuation report are to measure the plan's liabilities, to estimate the required employer contribution rate in accordance with actuarial standards and the New Hampshire State Statute, and to analyze changes in NHRS' actuarial position.

In addition, the report provides information in connection with Governmental Accounting Standards Board Statement No. 25 and No. 43 (GASB No. 25 and GASB No. 43), and it provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods.

### Financing Objectives

NHRS is supported by member contributions, employer contributions, and net earnings on the investments of the fund. The member contribution rate is set by statute at 5.00% of member compensation for Group I Members (Employees and Teachers) and 9.30% of member compensation for Group II Members (Police and Fire) of member's compensation. The employer contributions are determined in accordance with statute by an actuarial valuation. Legislation was enacted in 2007 which requires the use of the entry-age actuarial cost method and a 30-year amortization of unfunded actuarial accrued liability in the determination of the employer contributions.

We have estimated the pension contribution rates that will satisfy the statute based on the June 30, 2008 valuation to be:

	<b>Employer Contribution Rates</b>				
	<b>Employees</b>	<b>Teachers</b>	<b>Police</b>	<b>Fire</b>	<b>Total</b>
Pension	9.32%	9.67%	17.56%	23.71%	10.97%

In order for the statute to be satisfied, this entire rate must be contributed to the pension fund. The statute also requires that employers contribute the lesser of the "solvency rate" or 25% of total employer contributions to the 401(h) account for the medical subsidy. This is equivalent to the lesser of the "solvency rate" or 33 1/3% of employer pension contributions. In addition, a recent legal opinion by the Board's legal counsel has indicated that the 401(h) plan is split into the following groups: 1) State Employees; 2) Political Subdivision Employees; 3) Teachers and 4) Police/Fire. The table on the following page shows the pension and health subsidy contribution rates for each subgroup.

<b>Employer Contribution Rates</b>						
	<b>Political</b>					
	<b>State</b>	<b>Subdivision</b>				
	<b>Employees</b>	<b>Employees</b>	<b>Teachers</b>	<b>Police</b>	<b>Fire</b>	<b>Total</b>
Pension	9.32%	9.32%	9.67%	17.56%	23.71%	10.97%
Health	3.11%	0.02%	1.67%	2.60%	2.60%	1.72%
Total	12.43%	9.34%	11.34%	20.16%	26.31%	12.69%

Health solvency rates for the State Employees are based on the Statute and the assets as reported by NHRS. The assets reported by NHRS indicate that the State fund has a deficit that is treated as a liability under the State Employees Health Subtrust and as an asset under the Political Subdivision Health Subtrust for purposes of the solvency rate. We understand that the State and NHRS have discussed various methods of repayment and that legislation may be introduced in 2009 at the request of the State that may change the debt or repayment of the debt. The effect of such potential legislation has not been included in this valuation.



**Contribution Requirement**

RSA 100 - A:16 II provides that the State shall pay 35% of the computed contribution (referred to in statute as the “normal contribution”) for all political subdivision employers who have members in the Teachers, Police and Fire divisions. The table below indicates this breakdown of obligations for these members:

	<b>Employer Contribution Rates</b>											
	<b>Political Subdivision Employees</b>			<b>Teachers</b>			<b>Police</b>			<b>Fire</b>		
	<b>Political Subdivision</b>	<b>State</b>	<b>Total</b>	<b>Political Subdivision</b>	<b>State</b>	<b>Total</b>	<b>Political Subdivision</b>	<b>State</b>	<b>Total</b>	<b>Political Subdivision</b>	<b>State</b>	<b>Total</b>
Pension	9.32%	0.00%	9.32%	6.29%	3.38%	9.67%	11.41%	6.15%	17.56%	15.41%	8.30%	23.71%
Health	0.02%	0.00%	0.02%	1.09%	0.58%	1.67%	1.69%	0.91%	2.60%	1.69%	0.91%	2.60%
Total	9.34%	0.00%	9.34%	7.38%	3.96%	11.34%	13.10%	7.06%	20.16%	17.10%	9.21%	26.31%

In addition, there are two political subdivisions that are completing an initial buy-in to NHRS. Their remaining buy-in contributions are as follows:

<b>Fund</b>	<b>Agency</b>	<b>UAAL as of 6/30/2008</b>	<b>2008/2009 Contribution</b>	<b>UAAL as of 6/30/2009</b>	<b>2009/2010 Contribution</b>	<b>UAAL as of 6/30/2010</b>	<b>Fiscal Year of Final Payment</b>
Employees	Town of Raymond	\$ 17,826	\$ 2,667	\$ 16,674	\$ 2,667	\$ 15,424	2019
	Brookline Public Library	7,217	1,483	6,221	1,483	5,141	2014
	Total	\$ 25,043	\$ 4,150	\$ 22,895	\$ 4,150	\$ 20,565	

**Funded Status**

As of the valuation date, the Unfunded Actuarial Accrued Liability (UAAL) is \$2,519.3 million (pension only), and the funded ratio (the ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability) is 67.8%. This valuation was prepared using the Entry-Age Actuarial Cost Method.

**Variability of Future Contribution Rates**

The Actuarial Cost Method used to determine the contribution rate is intended to produce contribution rates which are generally level as a percent of payroll. Even so, when experience differs from the assumptions, as it often does, the employer's contribution rate can vary significantly from year-to-year.

Investment return across the country during the first quarter of FY 2009 has been extraordinarily unfavorable. If the market does not recover during the final 3 quarters of FY 2009, the employer contributions for fiscal years 2012 and 2013 will be substantially higher than estimated in this report. For example, if the investment return in FY09 was -15%, pension rates would increase by approximately 1% to 3% for Group I, 3% to 5% for Group II, and 2% to 3% for the System as a whole, and health rates would increase up to 1%.

**Actuarial Value of Assets**

The Actuarial Value of Assets of the System is more than the Market Value of Assets by \$105 million as of the valuation date (see page 8). This difference will be gradually recognized over the next four years in the absence of future gains/losses.

System Assets include a Special Account reserve of approximately \$224 million (after the transfer described under "benefit provisions") that is available to finance future pension benefit enhancements such as future COLAs.

Legislation enacted in 2007 precludes any asset gains from being transferred to the Special Account until such time as the funded status of NHRS reaches 85%. As a result, no asset transfer will occur in FY 2009.

**Benefit Provisions**

Legislation enacted in 2008 provided several changes. Those changes (with the exception of the July 1, 2008 COLA) were incorporated in the June 30, 2007 actuarial valuation.

The July 1, 2008 post retirement COLA resulted in an increase in accrued liabilities of approximately \$42.1 million. In addition, there were 3 special post retirement COLAs paid out as of July 1, 2008 totaling approximately \$14.6 million. Assets equal to the sum of these two amounts (\$56.7 million) were transferred from the Special Account to the net pension assets as of July 1, 2008. For purposes of the June 30, 2008 valuation, the transfer was assumed to have occurred on June 30, 2008.

**Actuarial Assumptions and Methods**

Section F summarizes the current assumptions. There were no changes in methods and assumptions.

We believe the assumptions are internally consistent and are reasonable, based on the actual experience of NHRS. These actuarial assumptions and methods comply with the parameters for disclosure in GASB Statement No. 25.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates, and amortization periods.

### Development of Actuarial Value of Assets

Year Ended June 30:	2007	2008	2009	2010	2011
A. Funding Value Beginning of Year	\$4,647,972,589	\$5,272,358,059			
B. Market Value End of Year	5,967,916,108	5,597,046,574			
C. Market Value Beginning of Year	5,112,256,446	5,967,916,108			
D. Non-Investment Net Cash Flow	25,324,266	(69,582,671)			
E. Investment Income					
E1. Market Total: B - C - D	830,335,396	(301,286,863)			
E2. Amount for Immediate Recognition (8.5%)	396,153,951	445,193,171			
E3. Amount for Phased-In Recognition: E1-E2	434,181,445	(746,480,034)			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.20 x E3	86,836,289	(\$149,296,007)			
F2. First Prior Year	116,070,964	86,836,289	(\$149,296,007)		
F3. Second Prior Year	0	116,070,964	\$ 86,836,289	(\$149,296,007)	
F4. Third Prior Year	0	0	116,070,964	\$ 86,836,289	(\$149,296,007)
F5. Fourth Prior Year	0	0	0	116,070,965	86,836,289
F6. Total Recognized Investment Gain	202,907,253	53,611,246	53,611,246	53,611,247	(62,459,718)
G. Preliminary Funding Value End of Year: A + D + E2 + F6	5,272,358,059	5,701,579,805			
H. Difference between Market & Funding Value: B-G	695,558,049	(104,533,231)			
I. Final Funding Value after 20% Corridor	5,272,358,059	5,701,579,805			
J. Recognized Rate of Return	12.85%	9.52%			

The Funding Value of Assets recognizes assumed investment income (line E2) fully each year. Differences between actual and assumed investment income (line E3) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than market value. The Funding Value of Assets is unbiased with respect to Market Value. At any time it may be either greater or less than Market Value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to Market Value. Final Funding Value of Assets may not be less than 80% nor more than 120% of Market Value of Assets.

### Allocation of Assets

	<b>Employees</b>	<b>Teachers</b>	<b>Police</b>	<b>Fire</b>	<b>Total</b>
Allocated Fund Assets (Actuarial Value)	\$ 1,773,406,754	\$ 2,206,450,781	\$ 1,154,011,268	\$ 567,711,002	\$ 5,701,579,805
Less Special Account	(44,213,574)	(69,258,513)	(69,647,998)	(41,238,988)	(224,359,073)
Less 401(h) Account	(33,004,645)	(22,649,523)	(70,274,918)	(49,257,640)	(175,186,726)
Net Pension Valuation Assets	\$ 1,696,188,535	\$ 2,114,542,745	\$ 1,014,088,352	\$ 477,214,374	\$ 5,302,034,006

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**SECTION B**  
FUNDING RESULTS

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## Development of Employer Contribution Rates

<b>Division:</b>	<b>Employees</b>	<b>Teachers</b>	<b>Police</b>	<b>Fire</b>	<b>Total</b>
<b>Normal Cost</b>					
Age and Service Retirement	7.83%	7.20%	13.75%	18.52%	8.67%
Termination	1.09%	0.96%	2.53%	0.87%	1.18%
Death in Service	0.19%	0.13%	0.17%	0.19%	0.16%
Disability	0.21%	0.01%	0.82%	0.77%	0.22%
Expenses	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>
Total	9.67%	8.65%	17.62%	20.70%	10.58%
<b>Member Contributions</b>	5.00%	5.00%	9.30%	9.30%	5.64%
Employer Normal Cost	4.67%	3.65%	8.32%	11.40%	4.94%
UAAL Payment*	<u>4.65%</u>	<u>6.02%</u>	<u>9.24%</u>	<u>12.31%</u>	<u>6.03%</u>
<b>Total Employer Pension Contribution</b>	<b>9.32%</b>	<b>9.67%</b>	<b>17.56%</b>	<b>23.71%</b>	<b>10.97%</b>
Total Health Subsidy Contribution	<u>3.11%</u> **	<u>1.67%</u>	<u>2.60%</u>	<u>2.60%</u>	<u>1.72%</u>
<b>Total Employer Contribution</b>	<b>12.43%</b> **	<b>11.34%</b>	<b>20.16%</b>	<b>26.31%</b>	<b>12.69%</b>
<b>Fiscal Year 2012 Contributions</b>					
Percent of Payroll	12.43% **	11.34%	20.16%	26.31%	12.69%
Estimated Dollars	\$ 130,027,651	\$ 123,852,470	\$ 56,206,696	\$ 29,095,435	\$ 339,182,252
<b>Fiscal Year 2013 Contributions</b>					
Percent of Payroll	12.43% **	11.34%	20.16%	26.31%	12.69%
Estimated Dollars	\$ 135,878,896	\$ 129,425,832	\$ 58,735,997	\$ 30,404,730	\$ 354,445,455
<b>Contribution Rates from Prior Valuation</b>					
FY 2010#	12.12%	10.70%	19.51%	24.69%	12.17%
FY 2011	12.12%	10.70%	19.51%	24.69%	12.17%

\* *Unfunded Actuarial Accrued Liability, financed over a 28 year period from the contribution effective date -- 7/1/2011.*

# *Computed in June 30, 2007 Actuarial Valuation.*

\*\* *Political Subdivision Employees Health Contribution is 0.02%, Political Subdivision Employees FY2012 and FY2013 Total rate is 9.34%*

## Development of Pension Actuarial Liabilities June 30, 2008

<b>Actuarial Present Value of</b>	<b>Total Present Value (1)</b>	<b>Portion Covered by Future Normal Cost Contributions (2)</b>	<b>Actuarial Accrued Liabilities (1) - (2)</b>
Age and service allowances based on total service likely to be rendered by present active members	\$ 5,778,915,363	\$ 1,710,602,706	\$ 4,068,312,657
Disability benefits likely to be paid to present active members	42,262,914	43,567,473	(1,304,559)
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	54,409,330	31,575,741	22,833,589
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	234,263,219	252,836,697	(18,573,478)
Benefits likely to be paid to current inactive and vested deferred members	131,930,555	-	131,930,555
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	3,618,117,588	-	3,618,117,588
<b>Total</b>	<b>\$ 9,859,898,969</b>	<b>\$ 2,038,582,617</b>	<b>\$ 7,821,316,352</b>
Actuarial Value of Assets	\$ 5,302,034,006	-	\$ 5,302,034,006
Liabilities to be covered by Future Contributions	\$ 4,557,864,963	\$ 2,038,582,617	\$ 2,519,282,346



**NHRS Total**  
**Unfunded Actuarial Accrued Liability Payoff Projection\***  
**(\$Millions)**

Year	Year	Employer Contribution Rates			Projected Payroll	UAAL		End of Year
	Ending June 30,	Total Contribution	Normal Cost	UAAL Payment		Beginning of Year	UAAL Payment	
	2009	10.52%	4.95%	2.94%	\$ 2,412	\$ 2,519	\$ 71	\$ 2,660
	2010	10.70%	4.95%	5.75%	2,521	2,660	145	2,735
	2011	10.70%	4.95%	5.75%	2,634	2,735	151	2,809
1	2012	10.97%	4.94%	6.03%	2,753	2,809	166	2,875
2	2013	10.97%	4.94%	6.03%	2,877	2,875	173	2,939
3	2014	10.97%	4.94%	6.03%	3,006	2,939	181	3,000
4	2015	10.97%	4.94%	6.03%	3,141	3,000	189	3,057
5	2016	10.97%	4.94%	6.03%	3,283	3,057	198	3,111
6	2017	10.97%	4.94%	6.03%	3,430	3,111	207	3,160
7	2018	10.97%	4.94%	6.03%	3,585	3,160	216	3,203
8	2019	10.97%	4.94%	6.03%	3,746	3,203	226	3,240
9	2020	10.97%	4.94%	6.03%	3,915	3,240	236	3,269
10	2021	10.97%	4.94%	6.03%	4,091	3,269	247	3,290
11	2022	10.97%	4.94%	6.03%	4,275	3,290	258	3,301
12	2023	10.97%	4.94%	6.03%	4,467	3,301	269	3,301
13	2024	10.97%	4.94%	6.03%	4,668	3,301	281	3,289
14	2025	10.97%	4.94%	6.03%	4,878	3,289	294	3,262
15	2026	10.97%	4.94%	6.03%	5,098	3,262	307	3,219
16	2027	10.97%	4.94%	6.03%	5,327	3,219	321	3,158
17	2028	10.97%	4.94%	6.03%	5,567	3,158	336	3,076
18	2029	10.97%	4.94%	6.03%	5,818	3,076	351	2,972
19	2030	10.97%	4.94%	6.03%	6,079	2,972	367	2,843
20	2031	10.97%	4.94%	6.03%	6,353	2,843	383	2,685
21	2032	10.97%	4.94%	6.03%	6,639	2,685	400	2,497
22	2033	10.97%	4.94%	6.03%	6,938	2,497	418	2,273
23	2034	10.97%	4.94%	6.03%	7,250	2,273	437	2,011
24	2035	10.97%	4.94%	6.03%	7,576	2,011	457	1,705
25	2036	10.97%	4.94%	6.03%	7,917	1,705	477	1,353
26	2037	10.97%	4.94%	6.03%	8,273	1,353	499	948
27	2038	10.97%	4.94%	6.03%	8,645	948	521	486
28	2039	10.97%	4.94%	6.03%	9,034	486	545	-

\* This projection does not reflect the impact of any potential gain sharing when the funded status exceeds 85%.

## Actuarial Balance Sheet as of June 30, 2008

## Assets and Present Value of Expected Future Contributions

	<b>Pension</b>	<b>Health</b>
<b>A. Present valuation assets</b>		
1. Net assets from system financial statements	\$ 5,425,203,302	\$ 171,843,272
2. Special Account	(224,359,073)	-
3. Funding value adjustment	101,189,777	3,343,454
4. Valuation assets	5,302,034,006	175,186,726
<b>B. Actuarial present value of expected future employer contributions</b>		
1. For normal costs	872,341,574	51,570,192
2. For unfunded actuarial accrued liability	2,519,282,346	494,688,094
3. Total	3,391,623,920	546,258,286
<b>C. Actuarial present value of expected future member contributions</b>	1,166,241,043	-
<b>D. Total Present and Expected Future Resources</b>	<b>\$ 9,859,898,969</b>	<b>\$ 721,445,012</b>

## Present Value of Expected Future Benefit Payments

	<b>Pension</b>	<b>Health</b>
<b>A. To retirees and beneficiaries</b>	\$ 3,618,117,588	\$ 501,808,559
<b>B. To vested terminated members</b>	119,503,954	3,506,547
<b>C. To non-vested terminated members (outstanding refunds)</b>	12,426,601	-
<b>D. To present active members</b>		
1. Allocated to service rendered prior to valuation date - actuarial accrued liability	4,071,268,209	164,559,714
2. Allocated to service likely to be rendered after valuation date	2,038,582,617	51,570,192
3. Total	6,109,850,826	216,129,906
<b>E. Total Actuarial Present Value of Expected Future Pension Payments</b>	<b>\$ 9,859,898,969</b>	<b>\$ 721,445,012</b>

## Experience Gain/(Loss) -- June 30, 2008

	<b>Pension</b>	<b>Health</b>
(1) UAAL* at start of biennium	\$ 2,397,458,855	\$ 481,433,892
(2) Normal cost from last valuation for year 1	242,738,832	7,499,405
(3) Actual contributions (employer and employee) for year 1	346,182,381	61,705,798
(4) Interest accrual: $[(1)+1/2 [(2)-(3))] \times .085$	199,387,652	38,618,109
(5) Expected UAAL end of year 1: $(1)+(2)-(3)+(4)$	2,493,402,958	465,845,608
(6) Change from legislation#	-	-
(7) Change from revised actuarial assumptions	-	-
(8) Expected UAAL after changes: $(5)+(6)+(7)$	2,493,402,958	465,845,608
(9) Actual UAAL at end of year	2,519,282,346	494,688,094
(10) Gain/(loss): $(8)-(9)$	(25,879,388)	(28,842,486)
(11) Gain/(loss) as percent of actuarial accrued liabilities at start of year	(0.4)%	(4.5)%

\* *Unfunded Actuarial Accrued Liabilities.*

# *An ad-hoc COLA of 1.5% up to \$30,000 for retirees with 20 or more years of service was granted, effective July 1, 2008. In addition, there were three special COLA checks payable as of July 1, 2008. The increase in accrued liabilities attributable to these COLAs was approximately \$56.7 million. An amount equal to the increase in accrued liabilities was transferred from the Special Accounts to the net assets available for pension of approximately \$56.7 million to cover this increase in accrued liabilities.*

## Pension Solvency Test

The New Hampshire Retirement System funding objective is to meet long-term benefit promises through contributions that remain approximately level from year-to-year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due -- the ultimate test of financial soundness.

A *solvency test* is one means of checking a system's progress under its funding program. In a solvency test, the plan's present assets (cash and investments) are compared with:

- 1) Active member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives;
- 3) The liabilities for service already rendered by active members.

In a System that has been following the discipline of level percent-of-payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the System.

### Total of all Groups (\$ in Thousands)

Fiscal Year	<u>Projected Pension Liabilities For</u>			Net Assets Available For Benefits	<u>Percentage of Accrued Liabilities Covered By Net Assets Available</u>		
	(1)	(2)	(3)		(1)	(2)	(3)
	Aggregate Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members (Employer Financed Portion)				
2007	\$2,228,853	\$3,210,280	\$1,838,642	\$4,612,256	100%	74%	0%
2007 *	2,228,853	3,210,280	1,820,582	4,862,256	100%	82%	0%
2008	2,312,069	3,618,118	1,891,129	5,302,034	100%	83%	0%

\* After reflection of 2008 legislation.

**Pension Solvency Test -- Comparative Statement**  
(\$ in Thousands)

Group	Fiscal Year	Projected Pension Liabilities For			Net Assets Available For Benefits	Percentage of Accrued Liabilities Covered By Net Assets Available		
		(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)		(1)	(2)	(3)
Employees	2007 *	\$797,627	\$ 997,992	\$528,538	\$1,539,196	100%	74%	0%
Teachers	2007 *	925,813	1,200,541	797,922	1,925,913	100%	83%	0%
Police	2007 *	344,485	655,803	339,086	934,744	100%	90%	0%
Fire	2007 *	160,927	355,944	155,036	462,403	100%	85%	0%
Employees	2008	837,375	1,124,075	581,109	1,696,189	100%	76%	0%
Teachers	2008	943,611	1,387,605	828,084	2,114,543	100%	84%	0%
Police	2008	359,611	727,584	339,186	1,014,088	100%	90%	0%
Fire	2008	171,471	378,854	142,751	477,214	100%	81%	0%

\* After reflection of 2008 legislation.

## Development of Pension Actuarial Liabilities June 30, 2008

### Employees

Actuarial Present Value of	Total Present Value (1)	Portion Covered by Future Normal Cost Contributions (2)	Actuarial Accrued Liabilities (1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$ 2,048,004,408	\$ 669,523,624	\$ 1,378,480,784
Disability benefits likely to be paid to present active members	12,335,267	18,426,406	(6,091,139)
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	27,304,880	16,388,305	10,916,575
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	82,676,685	110,283,098	(27,606,413)
Benefits likely to be paid to current inactive and vested deferred members	62,784,438	-	62,784,438
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	1,124,074,918	-	1,124,074,918
<b>Total</b>	<b>\$ 3,357,180,596</b>	<b>\$ 814,621,433</b>	<b>\$ 2,542,559,163</b>
Actuarial Value of Assets	\$ 1,696,188,535	-	\$ 1,696,188,535
Liabilities to be covered by Future Contributions	\$ 1,660,992,061	\$ 814,621,433	\$ 846,370,628

## Development of Pension Actuarial Liabilities June 30, 2008

### Teachers

Actuarial Present Value of	Total Present Value (1)	Portion Covered by Future Normal Cost Contributions (2)	Actuarial Accrued Liabilities (1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$ 2,291,524,477	\$ 574,309,911	\$ 1,717,214,566
Disability benefits likely to be paid to present active members	938,557	906,373	32,184
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	18,745,909	9,701,316	9,044,593
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	67,615,845	82,465,098	(14,849,253)
Benefits likely to be paid to current inactive and vested deferred members	60,253,023	-	60,253,023
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	1,387,604,991	-	1,387,604,991
<b>Total</b>	<b>\$ 3,826,682,802</b>	<b>\$ 667,382,698</b>	<b>\$ 3,159,300,104</b>
Actuarial Value of Assets	\$ 2,114,542,745	-	\$ 2,114,542,745
Liabilities to be covered by Future Contributions	\$ 1,712,140,057	\$ 667,382,698	\$ 1,044,757,359

## Development of Pension Actuarial Liabilities June 30, 2008

### Police

Actuarial Present Value of	Total Present Value (1)	Portion Covered by Future Normal Cost Contributions (2)	Actuarial Accrued Liabilities (1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$ 939,969,245	\$ 276,020,891	\$ 663,948,354
Disability benefits likely to be paid to present active members	21,119,828	16,421,456	4,698,372
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	5,463,930	3,517,693	1,946,237
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	71,782,909	50,978,206	20,804,703
Benefits likely to be paid to current inactive and vested deferred members	7,399,237	-	7,399,237
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	727,583,997	-	727,583,997
Total	\$ 1,773,319,146	\$ 346,938,246	\$ 1,426,380,900
Actuarial Value of Assets	\$ 1,014,088,352	-	\$ 1,014,088,352
Liabilities to be covered by Future Contributions	\$ 759,230,794	\$ 346,938,246	\$ 412,292,548



## Development of Pension Actuarial Liabilities June 30, 2008

### Fire

Actuarial Present Value of	Total Present Value (1)	Portion Covered by Future Normal Cost Contributions (2)	Actuarial Accrued Liabilities (1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$ 499,417,233	\$ 190,748,280	\$ 308,668,953
Disability benefits likely to be paid to present active members	7,869,262	7,813,238	56,024
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	2,894,611	1,968,427	926,184
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	12,187,780	9,110,295	3,077,485
Benefits likely to be paid to current inactive and vested deferred members	1,493,857	-	1,493,857
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	378,853,682	-	378,853,682
Total	\$ 902,716,425	\$ 209,640,240	\$ 693,076,185
Actuarial Value of Assets	\$ 477,214,374	-	\$ 477,214,374
Liabilities to be covered by Future Contributions	\$ 425,502,051	\$ 209,640,240	\$ 215,861,811

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**SECTION C**  
FUND ASSETS

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**Statement of System Assets**  
(Assets at Market or Fair Value)

<b>Item</b>	<b>June 30</b>	
	<b>2008</b>	<b>2007</b>
<b>A. Assets</b>		
1. Cash and short-term investments	N/A	\$ 807,393,749
2. Receivables	N/A	\$ 118,428,688
3. Contributions Receivable	N/A	35,952,687
4. Accrued Interest and Dividends	N/A	13,862,772
5. Other	N/A	79,407
6. Subtotals ( 2. + 3. + 4. + 5.)	N/A	\$ 168,323,554
Investments, at fair value		
7. Domestic Investments	N/A	\$ 4,098,499,564
8. Global Investments	N/A	1,135,674,908
9. Other	N/A	688,984,250
10. Subtotals (7. + 8. + 9.)	N/A	\$ 5,923,158,722
11. Total Assets (1. + 6. + 10.)	N/A	\$ 6,898,876,025
<b>B. Liabilities</b>		
1. Payables	N/A	\$ (930,959,917)
<b>C. Net System Assets (A11. + B1.)</b>	<b>\$ 5,597,046,575</b>	<b>\$ 5,967,916,108</b>

## Reconciliation of System Assets

Item	June 30, 2008				
	Employees	Teachers	Police#	Fire#	Total
A. Market Value of Assets at Beginning of Year	\$ 1,841,230,189	\$ 2,320,075,220	\$ 1,208,969,885	\$ 597,640,814	\$ 5,967,916,108
B. Revenues and Expenditures					
1. Contributions					
a. Employee Contributions	\$ 62,123,188	\$ 59,814,527	\$ 25,998,182	\$ 10,054,329	\$ 157,990,226
b. Employer Contributions	90,738,447	87,216,430	46,546,330	25,396,745	249,897,952
c. Total	\$ 152,861,635	\$ 147,030,957	\$ 72,544,512	\$ 35,451,074	\$ 407,888,178
2. Investment Return					
a. Interest, Dividends, and Other Income	\$ 38,419,212	\$ 47,754,821	\$ 24,810,203	\$ 12,207,641	\$ 123,191,877
b. Net Realized and Unrealized Gains/(Losses)	(120,968,605)	(150,859,570)	(81,035,043)	(39,618,880)	(392,482,098)
c. Investment Expenses	(7,118,964)	(8,854,033)	(4,589,421)	(2,259,443)	(22,821,861)
d. Net Investment Income	\$ (89,668,357)	\$ (111,958,782)	\$ (60,814,262)	\$ (29,670,681)	\$ (292,112,082)
3. Benefits and Refunds					
a. Refunds	\$ (16,436,698)	\$ (11,098,002)	\$ (4,347,046)	\$ (415,451)	\$ (32,297,197)
b. Regular Monthly Benefits	(126,510,120)	(153,093,533)	(71,180,091)	(38,748,329)	(389,532,073)
c. Partial Lump-Sum Benefits Paid	(1,216,520)	(723,965)	(333,762)	(123,200)	(2,397,447)
d. Medical Premium Subsidy Payments	(16,997,401)	(21,017,723)	(9,736,759)	(5,492,249)	(53,244,132)
e. Total	\$ (161,160,739)	\$ (185,933,223)	\$ (85,597,658)	\$ (44,779,229)	\$ (477,470,849)
4. Administrative and Miscellaneous Expenses	\$ (2,857,776)	\$ (3,551,887)	\$ (1,853,771)	\$ (911,346)	\$ (9,174,780)
5. Transfers	\$ -	\$ -	\$ -	\$ -	\$ -
C. Market Value of Assets at End of Year	\$ 1,740,404,952	\$ 2,165,662,285	\$ 1,133,248,706	\$ 557,730,632	\$ 5,597,046,575

# 401(h) subsidy income and expense reported by NHRS in total for Police and Fire was allocated 60% to Police and 40% to Fire for purposes of this schedule.

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## **SECTION D**

### ACCOUNTING DISCLOSURES

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**This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.**

**Schedule of Funding Progress**  
(As Required by GASB Statement No. 25)

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b)-(a)</b>	<b>Funded Ratio (a)/(b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percent of Covered Payroll [(b)-(a)]/(c)</b>
June 30, 2007	\$4,612,256,315	\$7,277,775,022	\$2,665,518,707	63.4%	\$2,195,339,382	121.4 %
June 30, 2007*	4,862,256,315	7,259,715,170	2,397,458,855	67.0%	2,195,339,382	109.2 %
June 30, 2008	5,302,034,006	7,821,316,352	2,519,282,346	67.8%	2,308,320,669	109.1 %

\* After 2008 Benefit/Legislative changes.

## Schedule of Employer Contributions

Fiscal Year Ending June 30:	GASB No. 25 Annual Required Contribution (ARC)*			Employer Contributions		% of GASB ARC Contributed
	Projected Payroll (\$ Thousands)	ARC as % of Payroll	Projected ARC <sup>##</sup> (\$ Thousands)	Actual Payroll (\$ Thousands)	Actual Contribution (\$ Thousands)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2008#	\$ 2,412,195	10.52 %	\$ 253,882	\$ 2,308,321	249,898	75 %
2009#	2,520,744	10.52 %	265,307			
2010	2,505,247	10.70 %	268,061			
2011	2,617,983	10.70 %	280,124			
2012**	2,634,177	10.97 %	288,969			
2013**	2,752,715	10.97 %	301,973			

\* ARC Amounts for 2008 through 2011 are estimated based on the contribution rate in effect in the year indicated and the June 30, 2007 valuation payroll projected at the assumed wage inflation rate of 4.50% per year.

# Developed by prior actuary.

## ARC is computed as a percent of payroll. Projected dollar amounts are illustrative.

\*\* Estimated-final rate to be determined in June 30, 2009 valuation.

## Notes to Required Supplementary Information (As Required by GASB Statement No. 25)

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	June 30, 2008
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Equivalent Single Amortization Period	28 Years
Valuation Asset Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return *	8.50%
Projected Salary Increase *	4.50% to 16.25%
* <i>Includes Price Inflation at</i>	3.50%
Rate of Payroll Growth	4.50%
Cost-of-Living Adjustments	None



Post-Retirement Health Care  
GASB Statement No. 43 Reporting

Determination of the Annual Required Contribution for Fiscal Years 2012 and 2013	Contributions Expressed as Percents of Payroll				
	State Employees	Political Subdivision Employees	Teachers	Police & Fire	Total
Normal Cost					
Age and Service Retirement	0.00%	0.00%	0.00%	1.92%	0.28%
Termination	0.00%	0.00%	0.00%	0.07%	0.01%
Death-in-Service	0.00%	0.00%	0.00%	0.05%	0.01%
Disability	0.00%	0.00%	0.00%	0.17%	0.02%
Total Normal Cost	0.00%	0.00%	0.00%	2.21%	0.32%
Amortization of Unfunded Actuarial Accrued Liabilities#					
	3.11%	0.02%	1.67%	2.26%	1.68%
Annual Required Contribution (ARC)	3.11%	0.02%	1.67%	4.47%	2.00%
Fiscal Year 2012 (ARC)					
Percent of Payroll	3.11%	0.02%	1.67%	4.47%	2.00%
Estimated Dollars	\$16,882,812	\$121,952	\$18,239,297	\$17,405,735	\$52,649,796
Fiscal Year 2013 (ARC)					
Percent of Payroll	3.11%	0.02%	1.67%	4.47%	2.00%
Estimated Dollars	\$17,642,539	\$127,440	\$19,060,065	\$18,188,993	\$55,019,037

Accrued Health Liabilities, \$650,434,383 were more than applicable assets of \$175,186,726.

The calculations above show the employer's Annual Required Contribution (ARC) for the years ended June 30, 2012 and June 30, 2013.

# 28-year amortization of UAAL, but not less than solvency rate.

**Determination of Unfunded Actuarial Accrued Liability (Medical)  
as of June 30, 2008**

	<b>State Employees</b>	<b>Political Subdivision Employees</b>	<b>Teachers</b>	<b>Police &amp; Fire</b>	<b>Total</b>
A. Present Value of Future Medical Benefits					
1. Retirees and Beneficiaries	\$ 95,935,658	\$ 54,885,160	\$ 194,516,589	\$ 156,471,152	\$ 501,808,559
2. Vested Terminated Members	-	-	3,506,547	-	3,506,547
3. Active Members	-	7,924,793	50,731,289	157,473,824	216,129,906
Total Present Value of Future Medical Benefits	95,935,658	62,809,953	248,754,425	313,944,976	721,445,012
B. Present Value of Future Employer Normal Costs	-	713,098	2,138,362	48,718,732	51,570,192
C. Present Value of Future Contributions from Current Active Members	-	-	-	-	-
D. Actuarial Medical Accrued Liability (A.-B.-C.)	95,935,658	62,096,855	246,616,063	265,226,244	669,874,820
E. 401(h) Subtrust Actuarial Value of Assets	(17,245,835)	50,250,480	22,649,523	119,532,558	175,186,726
F. Unfunded Actuarial Accrued Liability (D.-E.)	\$ 113,181,493	\$ 11,846,375	\$ 223,966,540	\$ 145,693,686	\$ 494,688,094

The Unfunded Actuarial Accrued Liability (UAAL) is not booked as an expense all in one-year under GASB Statement No. 43 and does not appear in the System's Statement of Net Assets. Nevertheless, it is reported in the Notes to the Financial Statements and in the Required Supplementary Information. These are information sections within the System's financial statements.

## NHRS - 401(h) Cash Flow Projections June 30, 2008

### State Employees

<b>Year Ending</b>	<b>Valuation Pay</b>	<b>Employer Contributions</b>			<b>Benefits Paid</b>	<b>Funding Value of Assets</b>
		<b>Rate -- Total</b>	<b>Rate -- Health</b>	<b>Dollars -- Health</b>		
6/30/2008	\$ 475,702,597					\$ (16,916,697)
6/30/2009	497,109,214	8.74%	2.19%	\$ 10,886,692	\$11,238,718	(18,721,604)
6/30/2010	519,479,129	12.12%	3.03%	15,740,218	10,644,620	(15,000,779)
6/30/2011	542,855,690	12.12%	3.03%	16,448,527	10,067,466	(9,623,589)
6/30/2012	567,284,196	12.43%	3.11%	17,642,538	9,868,938	(2,337,616)
6/30/2013	592,811,985	12.43%	3.11%	18,436,453	9,678,073	6,594,297
6/30/2014	619,488,524	10.85%	1.53%	9,482,633	9,482,633	7,154,813
6/30/2015	647,365,508	10.76%	1.44%	9,302,017	9,302,017	7,762,972
6/30/2016	676,496,956	10.67%	1.35%	9,119,187	9,119,187	8,422,825
6/30/2017	706,939,319	10.58%	1.26%	8,910,331	8,910,331	9,138,765
6/30/2018	738,751,588	10.49%	1.17%	8,679,004	8,679,004	9,915,560
6/30/2019	771,995,409	10.41%	1.09%	8,447,303	8,447,303	10,758,382
6/30/2020	806,735,202	10.34%	1.02%	8,196,862	8,196,862	11,672,845
6/30/2021	843,038,286	10.26%	0.94%	7,933,510	7,933,510	12,665,037
6/30/2022	880,975,009	10.19%	0.87%	7,654,685	7,654,685	13,741,565
6/30/2023	920,618,884	10.12%	0.80%	7,357,286	7,357,286	14,909,598
6/30/2024	962,046,734	10.05%	0.73%	7,043,561	7,043,561	16,176,914
6/30/2025	1,005,338,837	9.99%	0.67%	6,709,686	6,709,686	17,551,951
6/30/2026	1,050,579,085	9.93%	0.61%	6,360,482	6,360,482	19,043,867
6/30/2027	1,097,855,144	9.87%	0.55%	6,003,223	6,003,223	20,662,596
6/30/2028	1,147,258,625	9.81%	0.49%	5,644,076	5,644,076	22,418,917
6/30/2029	1,198,885,263	9.76%	0.44%	5,277,034	5,277,034	24,324,525
6/30/2030	1,252,835,100	9.71%	0.39%	4,927,096	4,927,096	26,392,110
6/30/2031	1,309,212,680	9.67%	0.35%	4,568,401	4,568,401	28,635,438
6/30/2032	1,368,127,251	9.63%	0.31%	4,209,251	4,209,251	31,069,451
6/30/2033	1,429,692,977	9.59%	0.27%	3,865,650	3,865,650	33,710,354

**NHRS - 401(h) Cash Flow Projections**  
**June 30, 2008**

**Political Subdivision Employees**

<u>Year Ending</u>	<u>Valuation Pay</u>	<u>Employer Contribution</u>			<u>Benefits Paid</u>	<u>Funding Value of Assets</u>
		<u>Rate -- Total</u>	<u>Rate -- Health</u>	<u>Dollars -- Health</u>		
6/30/2008	\$ 534,329,009					\$ 49,291,445
6/30/2009	558,373,814	8.74%	2.19%	\$ 12,228,387	\$6,365,165	59,593,627
6/30/2010	583,500,636	9.09%	0.00%	-	6,372,022	58,016,252
6/30/2011	609,758,165	9.09%	0.00%	-	6,101,270	56,587,059
6/30/2012	637,197,282	9.34%	0.02%	127,439	6,005,843	55,268,723
6/30/2013	665,871,160	9.34%	0.02%	133,174	5,906,298	53,948,083
6/30/2014	695,835,362	9.34%	0.02%	139,167	5,868,277	52,561,073
6/30/2015	727,147,953	9.34%	0.02%	145,430	5,869,757	51,061,153
6/30/2016	759,869,611	9.34%	0.02%	151,974	5,850,511	49,460,627
6/30/2017	794,063,743	9.34%	0.02%	158,813	5,820,560	47,762,409
6/30/2018	829,796,611	9.34%	0.02%	165,959	5,780,198	45,969,370
6/30/2019	867,137,458	9.34%	0.02%	173,427	5,738,623	44,075,050
6/30/2020	906,158,644	9.34%	0.02%	181,232	5,684,471	42,084,302
6/30/2021	946,935,783	9.34%	0.02%	189,387	5,611,164	40,009,265
6/30/2022	989,547,893	9.34%	0.02%	197,910	5,519,785	37,861,998
6/30/2023	1,034,077,548	9.34%	0.02%	206,816	5,407,479	35,658,577
6/30/2024	1,080,611,038	9.34%	0.02%	216,122	5,272,567	33,418,212
6/30/2025	1,129,238,535	9.34%	0.02%	225,848	5,114,811	31,162,016
6/30/2026	1,180,054,269	9.34%	0.02%	236,011	4,942,785	28,903,976
6/30/2027	1,233,156,711	9.34%	0.02%	246,631	4,755,066	26,660,770
6/30/2028	1,288,648,763	9.34%	0.02%	257,730	4,548,751	24,453,546
6/30/2029	1,346,637,957	9.34%	0.02%	269,328	4,333,393	22,295,310
6/30/2030	1,407,236,665	9.34%	0.02%	281,447	4,106,699	20,202,586
6/30/2031	1,470,562,315	9.34%	0.02%	294,112	3,868,628	18,193,373
6/30/2032	1,536,737,619	9.34%	0.02%	307,348	3,620,913	16,285,419
6/30/2033	1,605,890,812	9.34%	0.02%	321,178	3,372,050	14,489,145

**NHRS - 401(h) Cash Flow Projections**  
**June 30, 2008**

**Teachers**

<b>Year Ending</b>	<b>Valuation Pay</b>	<b>Employer Contributions</b>			<b>Benefits Paid</b>	<b>Funding Value of Assets</b>
		<b>Rate --Total</b>	<b>Rate -- Health</b>	<b>Dollars -- Health</b>		
6/30/2008	\$ 957,067,895					\$ 22,217,255
6/30/2009	1,000,135,950	8.93%	2.23%	\$ 22,303,032	\$22,534,553	23,864,361
6/30/2010	1,045,142,068	10.70%	1.32%	13,795,875	23,806,164	15,457,106
6/30/2011	1,092,173,461	10.70%	1.32%	14,416,690	23,010,166	7,812,261
6/30/2012	1,141,321,267	11.34%	1.67%	19,060,065	22,902,695	4,470,361
6/30/2013	1,192,680,724	11.34%	1.67%	19,917,768	22,475,635	2,183,766
6/30/2014	1,246,351,357	11.34%	1.67%	20,814,068	22,337,930	780,759
6/30/2015	1,302,437,168	11.34%	1.67%	21,750,701	22,249,369	327,263
6/30/2016	1,361,046,841	11.34%	1.63%	22,243,885	22,243,885	355,080
6/30/2017	1,422,293,949	11.34%	1.56%	22,233,961	22,233,961	385,262
6/30/2018	1,486,297,177	11.34%	1.50%	22,296,114	22,296,114	418,009
6/30/2019	1,553,180,550	11.34%	1.44%	22,345,196	22,345,196	453,540
6/30/2020	1,623,073,675	11.34%	1.38%	22,363,661	22,363,661	492,090
6/30/2021	1,696,111,990	11.34%	1.32%	22,348,463	22,348,463	533,917
6/30/2022	1,772,437,030	11.34%	1.26%	22,284,686	22,284,686	579,300
6/30/2023	1,852,196,696	11.34%	1.19%	22,130,104	22,130,104	628,541
6/30/2024	1,935,545,547	11.34%	1.13%	21,923,424	21,923,424	681,966
6/30/2025	2,022,645,097	11.34%	1.07%	21,649,231	21,649,231	739,934
6/30/2026	2,113,664,126	11.34%	1.01%	21,302,439	21,302,439	802,828
6/30/2027	2,208,779,012	11.34%	0.95%	20,881,362	20,881,362	871,068
6/30/2028	2,308,174,068	11.34%	0.88%	20,387,530	20,387,530	945,109
6/30/2029	2,412,041,901	11.34%	0.82%	19,816,583	19,816,583	1,025,443
6/30/2030	2,520,583,787	11.34%	0.76%	19,173,718	19,173,718	1,112,606
6/30/2031	2,634,010,057	11.34%	0.70%	18,462,590	18,462,590	1,207,177
6/30/2032	2,752,540,510	11.34%	0.64%	17,684,487	17,684,487	1,309,788
6/30/2033	2,876,404,833	11.34%	0.59%	16,845,219	16,845,219	1,421,120

**NHRS - 401(h) Cash Flow Projections**  
**June 30, 2008**

**Police and Fire**

<u>Year Ending</u>	<u>Valuation Pay</u>	<u>Employer Contributions</u>			<u>Benefits Paid</u>	<u>Funding Value of Assets</u>
		<u>Rate -- Total</u>	<u>Rate -- Health</u>	<u>Dollars -- Health</u>		
6/30/2008	\$ 341,221,168					\$ 119,532,558
6/30/2009	356,576,121		5.01%	\$ 17,864,464	\$15,774,302	131,871,820
6/30/2010	372,622,046		2.17%	8,085,898	16,532,342	134,275,507
6/30/2011	389,390,038	N/A	2.17%	8,449,764	17,229,926	136,535,607
6/30/2012	406,912,590	N/A	2.60%	10,579,727	18,483,919	139,901,013
6/30/2013	425,223,657	N/A	2.60%	11,055,815	19,785,954	142,691,429
6/30/2014	444,358,722	N/A	2.60%	11,553,327	21,160,450	144,804,775
6/30/2015	464,354,864	N/A	2.60%	12,073,226	22,563,791	146,176,767
6/30/2016	485,250,833	N/A	2.60%	12,616,522	23,981,837	146,753,451
6/30/2017	507,087,120	N/A	2.60%	13,184,265	25,431,858	146,459,379
6/30/2018	529,906,040	N/A	2.60%	13,777,557	26,897,335	145,231,058
6/30/2019	553,751,812	N/A	2.60%	14,397,547	28,484,394	142,890,160
6/30/2020	578,670,644	N/A	2.60%	15,045,437	30,139,288	139,300,484
6/30/2021	604,710,823	N/A	2.60%	15,722,481	31,719,863	134,463,754
6/30/2022	631,922,810	N/A	2.60%	16,429,993	33,178,572	128,432,780
6/30/2023	660,359,336	N/A	2.60%	17,169,343	34,444,086	121,340,647
6/30/2024	690,075,506	N/A	2.60%	17,941,963	35,488,107	113,362,747
6/30/2025	721,128,904	N/A	2.60%	18,749,352	36,369,773	104,629,291
6/30/2026	753,579,705	N/A	2.60%	19,593,072	37,048,195	95,325,815
6/30/2027	787,490,792	N/A	2.60%	20,474,761	37,605,831	85,569,369
6/30/2028	822,927,878	N/A	2.60%	21,396,125	37,987,755	75,545,991
6/30/2029	859,959,633	N/A	2.60%	22,358,950	38,256,947	65,393,738
6/30/2030	898,657,816	N/A	2.60%	23,365,103	38,359,556	55,320,488
6/30/2031	939,097,418	N/A	2.60%	24,416,533	38,299,966	45,549,251
6/30/2032	981,356,802	N/A	2.60%	25,515,277	38,113,351	36,287,445
6/30/2033	1,025,517,858	N/A	2.60%	26,663,464	37,817,657	27,743,632

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**SECTION E**  
PARTICIPANT DATA

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## Retirees and Beneficiaries Reconciliation (In Thousands)

Fiscal Year	Added to Rolls		Removed from Rolls		Rolls End of Year		Average Annual	
	No.**	Annual Allowances*	No.	Annual Allowances	No.	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
2005					18,950	\$ 296,354		\$ 15,639
2007	3,211	\$ 73,490	913	\$ 12,081	21,248	357,763	9.87%	16,837
2008	2,216	53,600	594	10,923	22,870	400,440	5.80%	17,509

\* Includes additional COLA allowances. The benefit amounts shown are the monthly benefits as of July 1, 2007 annualized and are not the actual benefits paid during the fiscal year.

\*\* Includes beneficiaries in receipt but excludes deferred vested terminations.



## Retirees and Beneficiaries Age Distribution Employees

### SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
40 - 44		\$	\$	4	\$ 33,526	\$ 8,382
45 - 49				16	110,610	6,913
50 - 54	55	981,609	17,847	77	812,982	10,558
55 - 59	302	5,540,975	18,348	321	4,514,647	14,064
60 - 64	838	15,810,939	18,867	1,022	12,554,829	12,285
65 - 69	951	13,063,843	13,737	1,266	11,896,955	9,397
70 - 74	874	10,840,362	12,403	940	7,816,779	8,316
75 - 79	674	8,395,853	12,457	676	5,345,005	7,907
80 - 84	454	4,957,563	10,920	507	3,901,706	7,696
85 - 89	212	2,160,405	10,191	281	1,729,734	6,156
90 - 94	57	473,500	8,307	94	561,221	5,970
95 - 99	10	69,203	6,920	23	163,364	7,103
100 & Over	3	60,794	20,265			
<b>TOTAL</b>	<b>4,430</b>	<b>\$ 62,355,046</b>	<b>\$ 14,076</b>	<b>5,227</b>	<b>\$ 49,441,358</b>	<b>\$ 9,459</b>

### DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
30 - 34		\$	\$	4	\$ 46,641	\$ 11,660
35 - 39	5	51,260	10,252	2	21,508	10,754
40 - 44	13	173,552	13,350	20	267,302	13,365
45 - 49	31	434,478	14,015	41	454,071	11,075
50 - 54	55	750,227	13,640	66	833,319	12,626
55 - 59	83	1,066,001	12,843	100	1,152,291	11,523
60 - 64	84	1,153,465	13,732	92	1,040,370	11,308
65 - 69	57	678,143	11,897	59	720,470	12,211
70 - 74	34	352,030	10,354	22	254,061	11,548
75 - 79	15	208,790	13,919	12	149,938	12,495
80 - 84	6	111,611	18,602	8	85,885	10,736
85 - 89	2	21,545	10,773	4	52,416	13,104
90 - 94				1	9,541	9,541
95 - 99				1	9,655	9,655
100 & Over				1	9,515	9,515
<b>TOTAL</b>	<b>385</b>	<b>\$ 5,001,102</b>	<b>\$ 12,990</b>	<b>433</b>	<b>\$ 5,106,983</b>	<b>\$ 11,794</b>

## Retirees and Beneficiaries Age Distribution Employees

### BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
Under 20		\$	\$	1	\$ 4,916	\$ 4,916
20 - 24						
25 - 29	4	11,724	2,931			
30 - 34	1	13,114	13,114	3	17,867	5,956
35 - 39	1	2,896	2,896	2	5,777	2,889
40 - 44	4	7,561	1,890	10	72,955	7,296
45 - 49	6	27,464	4,577	21	215,524	10,263
50 - 54	14	54,382	3,884	22	209,014	9,501
55 - 59	19	110,493	5,815	63	662,030	10,508
60 - 64	10	68,570	6,857	68	771,383	11,344
65 - 69	13	58,750	4,519	85	932,403	10,969
70 - 74	16	155,048	9,691	151	1,512,323	10,015
75 - 79	18	158,796	8,822	192	2,054,038	10,698
80 - 84	14	90,207	6,443	168	1,310,964	7,803
85 - 89	8	31,123	3,890	126	892,379	7,082
90 - 94	1	1,538	1,538	50	316,239	6,325
95 - 99				12	90,485	7,540
100 & Over				2	12,302	6,151
<b>TOTAL</b>	<b>129</b>	<b>\$ 791,666</b>	<b>\$ 6,137</b>	<b>976</b>	<b>\$ 9,080,599</b>	<b>\$ 9,304</b>

## Retirees and Beneficiaries Age Distribution Teachers

### SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
45 - 49	3	\$ 27,125	\$ 9,042	2	\$ 24,321	\$ 12,161
50 - 54	6	102,887	17,148	42	412,051	9,811
55 - 59	218	5,109,131	23,436	577	11,721,549	20,315
60 - 64	725	18,591,351	25,643	1,476	30,647,686	20,764
65 - 69	527	12,296,679	23,333	1,047	19,761,142	18,874
70 - 74	343	8,513,692	24,821	681	12,765,533	18,745
75 - 79	237	5,553,399	23,432	401	7,253,674	18,089
80 - 84	98	1,858,047	18,960	285	4,796,559	16,830
85 - 89	51	783,342	15,360	221	2,880,666	13,035
90 - 94	16	230,600	14,413	115	1,237,443	10,760
95 - 99	2	5,635	2,818	57	579,601	10,168
100 & Over				10	78,497	7,850
<b>TOTAL</b>	<b>2,226</b>	<b>\$ 53,071,888</b>	<b>\$ 23,842</b>	<b>4,914</b>	<b>\$ 92,158,722</b>	<b>\$ 18,754</b>

### DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
40 - 44		\$	\$	3	\$ 32,702	\$ 10,901
45 - 49						
50 - 54	2	25,053	12,527	13	193,699	14,900
55 - 59	11	181,042	16,458	31	497,916	16,062
60 - 64	7	156,766	22,395	25	380,847	15,234
65 - 69	11	209,834	19,076	16	280,868	17,554
70 - 74	6	131,026	21,838	12	197,274	16,440
75 - 79	10	148,790	14,879	13	171,047	13,157
80 - 84	4	56,857	14,214	8	88,034	11,004
85 - 89				8	91,564	11,446
90 - 94				1	13,305	13,305
95 - 99				1	9,883	9,883
100 & Over						
<b>TOTAL</b>	<b>51</b>	<b>\$ 909,368</b>	<b>\$ 17,831</b>	<b>131</b>	<b>\$ 1,957,139</b>	<b>\$ 14,940</b>

## Retirees and Beneficiaries Age Distribution Teachers

### BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
20 - 24	1	\$ 4,602	\$ 4,602	1	\$ 12,796	\$ 12,796
25 - 29	1	3,151	3,151			
30 - 34	1	16,489	16,489	3	10,815	3,605
35 - 39	2	10,438	5,219			
40 - 44	2	14,123	7,062	3	25,662	8,554
45 - 49	6	46,813	7,802	3	54,930	18,310
50 - 54	4	60,870	15,218	12	128,129	10,677
55 - 59	7	79,483	11,355	26	414,600	15,946
60 - 64	11	156,238	14,203	28	639,178	22,828
65 - 69	11	147,680	13,425	40	851,868	21,297
70 - 74	13	186,921	14,379	36	751,843	20,885
75 - 79	12	210,840	17,570	41	937,701	22,871
80 - 84	8	144,669	18,084	22	321,294	14,604
85 - 89	5	67,558	13,512	20	212,297	10,615
90 - 94	3	37,450	12,483	9	89,962	9,996
95 - 99				1	9,883	9,883
100 & Over						
<b>TOTAL</b>	<b>87</b>	<b>\$ 1,187,325</b>	<b>\$ 13,647</b>	<b>245</b>	<b>\$ 4,460,958</b>	<b>\$ 18,208</b>

## Retirees and Beneficiaries Age Distribution Police

### SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
35 - 39		\$	\$	2	\$ 9,629	\$ 4,815
40 - 44				4	16,355	4,089
45 - 49	217	9,675,823	44,589	32	743,240	23,226
50 - 54	284	12,294,104	43,289	50	1,041,559	20,831
55 - 59	292	11,686,479	40,022	46	975,610	21,209
60 - 64	289	10,168,036	35,184	42	650,433	15,487
65 - 69	218	6,583,111	30,198	35	559,234	15,978
70 - 74	131	3,242,237	24,750	21	314,284	14,966
75 - 79	95	2,034,996	21,421	11	159,842	14,531
80 - 84	39	1,251,678	32,094	6	106,905	17,818
85 - 89	20	439,507	21,975	3	30,476	10,159
90 - 94	5	116,415	23,283	2	17,761	8,881
95 - 99						
100 & Over	1	17,305	17,305			
<b>TOTAL</b>	<b>1,591</b>	<b>\$ 57,509,691</b>	<b>\$ 36,147</b>	<b>254</b>	<b>\$ 4,625,328</b>	<b>\$ 18,210</b>

### DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
30 - 34	2	\$ 45,852	\$ 22,926	1	\$ 29,280	\$ 29,280
35 - 39	6	278,056	46,343			
40 - 44	20	664,048	33,202	2	40,908	20,454
45 - 49	30	932,434	31,081	2	50,194	25,097
50 - 54	45	1,431,716	31,816	8	250,937	31,367
55 - 59	45	1,386,627	30,814	9	238,100	26,456
60 - 64	52	1,415,875	27,228	10	229,424	22,942
65 - 69	37	1,024,620	27,692	2	34,917	17,459
70 - 74	14	365,251	26,089	1	11,995	11,995
75 - 79	16	345,755	21,610	1	21,349	21,349
80 - 84	2	23,690	11,845			
85 - 89	4	66,713	16,678			
90 - 94						
95 - 99						
100 & Over						
<b>TOTAL</b>	<b>273</b>	<b>\$ 7,980,637</b>	<b>\$ 29,233</b>	<b>36</b>	<b>\$ 907,104</b>	<b>\$ 25,197</b>

## Retirees and Beneficiaries Age Distribution Police

### BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
Under 20	2	\$ 21,006	\$ 10,503	1	\$ 29,526	\$ 29,526
20 - 24						
25 - 29						
30 - 34						
35 - 39				4	58,590	14,648
40 - 44	1	36,225	36,225	1	15,462	15,462
45 - 49				2	70,583	35,292
50 - 54	3	85,895	28,632	15	376,132	25,075
55 - 59	1	11,959	11,959	17	272,426	16,025
60 - 64	3	36,664	12,221	28	675,138	24,112
65 - 69				32	480,242	15,008
70 - 74	6	50,719	8,453	44	657,048	14,933
75 - 79	1	11,311	11,311	34	513,268	15,096
80 - 84	6	58,209	9,702	47	556,836	11,848
85 - 89				18	177,968	9,887
90 - 94	1	12,131	12,131	14	184,672	13,191
95 - 99				1	6,016	6,016
100 & Over						
<b>TOTAL</b>	<b>24</b>	<b>\$ 324,119</b>	<b>\$ 13,505</b>	<b>258</b>	<b>\$ 4,073,907</b>	<b>\$ 15,790</b>

## Retirees and Beneficiaries Age Distribution Fire

### SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
45 - 49	48	\$ 2,279,910	\$ 47,498	8	\$ 135,594	\$ 16,949
50 - 54	152	6,966,577	45,833	12	123,978	10,332
55 - 59	196	8,527,917	43,510	12	190,295	15,858
60 - 64	145	5,408,049	37,297	9	153,721	17,080
65 - 69	101	3,611,246	35,755	3	34,334	11,445
70 - 74	72	2,217,555	30,799	2	30,417	15,209
75 - 79	46	1,238,197	26,917			
80 - 84	41	1,079,346	26,326	1	25,091	25,091
85 - 89	13	297,098	22,854			
90 - 94	6	119,387	19,898			
95 - 99	1	19,164	19,164			
100 & Over						
<b>TOTAL</b>	<b>821</b>	<b>\$ 31,764,446</b>	<b>\$ 38,690</b>	<b>47</b>	<b>\$ 693,430</b>	<b>\$ 14,754</b>

### DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
30 - 34	1	\$ 28,400	\$ 28,400			
35 - 39	1	27,329	27,329			
40 - 44	5	170,979	34,196			
45 - 49	5	121,384	24,277	1	\$ 39,999	\$ 39,999
50 - 54	17	579,539	34,091	1	25,678	25,678
55 - 59	20	534,406	26,720			
60 - 64	13	350,103	26,931			
65 - 69	24	600,013	25,001			
70 - 74	15	394,330	26,289			
75 - 79	7	184,546	26,364			
80 - 84	6	158,252	26,375			
85 - 89	5	76,637	15,327			
90 - 94	2	34,810	17,405			
95 - 99						
100 & Over						
<b>TOTAL</b>	<b>121</b>	<b>\$ 3,260,728</b>	<b>\$ 26,948</b>	<b>2</b>	<b>\$ 65,677</b>	<b>\$ 32,839</b>

## Retirees and Beneficiaries Age Distribution Fire

### BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
Under 20	2	\$ 11,478	\$ 5,739		\$	\$
20 - 24				1	5,739	5,739
25 - 29						
30 - 34						
35 - 39	2	25,702	12,851	1	43,856	43,856
40 - 44				1	35,178	35,178
45 - 49				5	71,275	14,255
50 - 54				13	266,435	20,495
55 - 59				7	99,562	14,223
60 - 64				21	553,752	26,369
65 - 69				15	252,416	16,828
70 - 74	1	15,388	15,388	25	514,244	20,570
75 - 79				35	632,120	18,061
80 - 84	3	57,100	19,033	38	558,213	14,690
85 - 89				27	405,960	15,036
90 - 94				9	131,747	14,639
95 - 99	1	6,591	6,591	2	26,256	13,128
100 & Over						
<b>TOTAL</b>	<b>9</b>	<b>\$ 116,259</b>	<b>\$ 12,918</b>	<b>200</b>	<b>\$ 3,596,753</b>	<b>\$ 17,984</b>



## Active Members by Valuation Division

Valuation Group	Active Members	Valuation Payroll	Average		
			Age	Service	Pay
Employees:					
Male	10,194	\$ 445,203,030	47.7	10.3	\$43,673
Female	16,313	564,828,576	47.2	8.9	34,624
Total	26,507	1,010,031,606	47.4	9.4	38,104
Teachers:					
Male	4,255	235,373,931	45.7	13.2	55,317
Female	14,254	721,693,964	45.5	12.2	50,631
Total	18,509	957,067,895	45.6	12.4	51,708
Police:					
Male	3,794	217,506,711	38.5	10.3	57,329
Female	538	26,807,460	38.7	8.3	49,828
Total	4,332	244,314,171	38.5	10.0	56,398
Fire:					
Male	1,593	94,478,808	39.8	11.8	59,309
Female	47	2,428,189	38.5	8.9	51,664
Total	1,640	96,906,997	39.7	11.7	59,090
Total:					
Male	19,836	992,562,480	44.9	11.0	50,038
Female	31,152	1,315,758,189	46.3	10.4	42,237
Grand Total	50,988	\$2,308,320,669	45.7	10.6	\$45,272

Valuation Group	Active Members	Valuation Payroll
Employees:		
State	11,193	\$ 475,702,597
Political Subdivisions	15,314	534,329,009
Subtotal	26,507	1,010,031,606
Teachers:	18,509	957,067,895
Police:		
State	1,292	72,766,921
Political Subdivisions	3,040	171,547,250
Subtotal	4,332	244,314,171
Fire:		
State	64	3,327,960
Political Subdivisions	1,576	93,579,037
Subtotal	1,640	96,906,997
Total	50,988	\$ 2,308,320,669

## Age and Service Distribution

Employees  
June 30, 2008

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No	Valuation Payroll
15-19	51							51	\$ 882,803
20-24	778	8						786	18,490,951
25-29	1,272	231	2					1,505	43,912,256
30-34	992	452	115	1				1,560	52,526,993
35-39	1,157	655	350	137	13			2,312	86,561,171
40-44	1,405	810	415	367	229	11		3,237	122,657,177
45-49	1,693	1,110	620	436	357	176	27	4,419	170,075,988
50-54	1,512	1,175	743	587	409	284	214	4,924	193,385,859
55-59	1,149	922	636	591	469	261	309	4,337	184,232,626
60-64	543	602	373	327	302	155	192	2,494	103,387,156
65-69	131	207	116	84	82	37	43	700	27,759,206
70+	40	48	33	27	10	10	14	182	6,159,420
<b>TOTAL</b>	<b>10,723</b>	<b>6,220</b>	<b>3,403</b>	<b>2,557</b>	<b>1,871</b>	<b>934</b>	<b>799</b>	<b>26,507</b>	<b>\$1,010,031,606</b>

*While not used in the financial computations, the following group averages are computed and shown because of their general interest.*

Age: 47.4 years  
Service: 9.4 years  
Annual Pay: \$38,104

## Age and Service Distribution

Teachers  
June 30, 2008

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No	Valuation Payroll
15-19	1							1	\$ 34,758
20-24	223							223	7,158,666
25-29	1,567	199	1					1,767	64,090,732
30-34	902	1,039	123	1				2,065	87,427,348
35-39	624	696	591	63	1			1,975	94,508,901
40-44	576	496	450	348	80	4		1,954	100,041,396
45-49	588	619	396	294	488	92	6	2,483	131,356,496
50-54	443	584	521	360	458	428	185	2,979	165,759,930
55-59	312	373	517	458	482	423	756	3,321	197,737,956
60-64	124	146	204	193	300	200	379	1,546	96,931,018
65-69	17	22	24	24	33	21	34	175	10,811,412
70+	5	4		5	2	2	2	20	1,209,282
<b>TOTAL</b>	<b>5,382</b>	<b>4,178</b>	<b>2,827</b>	<b>1,746</b>	<b>1,844</b>	<b>1,170</b>	<b>1,362</b>	<b>18,509</b>	<b>\$957,067,895</b>

*While not used in the financial computations, the following group averages are computed and shown because of their general interest.*

Age: 45.6 years  
Service: 12.4 years  
Annual Pay: \$51,708

## Age and Service Distribution

Police  
June 30, 2008

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No	Valuation Payroll
15-19	2							2	\$ 51,090
20-24	224							224	8,135,063
25-29	513	115	3					631	29,640,796
30-34	253	369	79	2				703	37,641,564
35-39	205	231	335	93	3			867	49,891,044
40-44	117	152	144	239	136	23		811	49,720,881
45-49	64	75	68	110	143	59	6	525	34,735,776
50-54	47	51	38	50	56	50	14	306	19,438,600
55-59	28	32	23	39	17	22	13	174	10,040,223
60-64	9	9	15	22	8	5	5	73	4,113,753
65-69	3	2	4	2	2		2	15	836,682
70+				1				1	68,699
<b>TOTAL</b>	<b>1,465</b>	<b>1,036</b>	<b>709</b>	<b>558</b>	<b>365</b>	<b>159</b>	<b>40</b>	<b>4,332</b>	<b>\$244,314,171</b>

*While not used in the financial computations, the following group averages are computed and shown because of their general interest.*

Age: 38.5 years  
Service: 10 years  
Annual Pay: \$56,398

## Age and Service Distribution

Fire  
June 30, 2008

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No	Valuation Payroll
20-24	65							65	\$ 2,422,091
25-29	126	42						168	7,730,840
30-34	83	105	29					217	11,241,017
35-39	73	130	82	35	3			323	18,592,132
40-44	45	83	67	102	80	2		379	23,440,342
45-49	25	38	30	45	97	39	1	275	18,559,894
50-54	6	24	8	26	35	39	9	147	10,378,286
55-59	4	2	4	3	13	11	15	52	3,602,442
60-64		3	1	2		1	4	11	798,173
65-69					2		1	3	141,780
70+									
<b>TOTAL</b>	<b>427</b>	<b>427</b>	<b>221</b>	<b>213</b>	<b>230</b>	<b>92</b>	<b>30</b>	<b>1,640</b>	<b>\$ 96,906,997</b>

*While not used in the financial computations, the following group averages are computed and shown because of their general interest.*

Age: 39.7 years  
Service: 11.7 years  
Annual Pay: \$59,090

## Age and Service Distribution

Total  
June 30, 2008

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No	Valuation Payroll
15-19	54							54	\$ 968,651
20-24	1,290	8						1,298	36,206,771
25-29	3,478	587	6					4,071	145,374,624
30-34	2,230	1,965	346	4				4,545	188,836,922
35-39	2,059	1,712	1,358	328	20			5,477	249,553,248
40-44	2,143	1,541	1,076	1,056	525	40		6,381	295,859,796
45-49	2,370	1,842	1,114	885	1,085	366	40	7,702	354,728,154
50-54	2,008	1,834	1,310	1,023	958	801	422	8,356	388,962,675
55-59	1,493	1,329	1,180	1,091	981	717	1,093	7,884	395,613,247
60-64	676	760	593	544	610	361	580	4,124	205,230,100
65-69	151	231	144	110	119	58	80	893	39,549,080
70+	45	52	33	33	12	12	16	203	7,437,401
<b>TOTAL</b>	<b>17,997</b>	<b>11,861</b>	<b>7,160</b>	<b>5,074</b>	<b>4,310</b>	<b>2,355</b>	<b>2,231</b>	<b>50,988</b>	<b>\$2,308,320,669</b>

*While not used in the financial computations, the following group averages are computed and shown because of their general interest.*

Age: 45.7 years  
Service: 10.6 years  
Annual Pay: \$45,272

## Historical Summary of Active Member Data

### Total

Valuation Date	Active Members		Covered Payroll		Average Salary		Average	
	No.	% Inc.*	\$ Amount	% Inc.*	\$ Amount	% Inc.*	Age	Service
2005	50,802	N/A	\$2,195,339,382	N/A	\$ 43,214	N/A	45.6	10.6
2007	50,802	(0.3%)	2,195,339,382	3.6%	43,214	3.9%	45.6	10.6
2008	50,988	0.2%	2,308,320,669	2.5%	45,272	2.4%	45.7	10.6

\* Average annual increase.

### By Valuation Group (valuation payroll in thousands)

	Fiscal Year	Active Members#	Valuation Payroll	Average Compensation	% Inc.*
Employees	2008	26,507	\$1,010,032	\$38,104	3.47 %
Teachers		18,509	957,068	51,708	1.78 %
Police		4,332	244,314	56,398	1.50 %
Fire		1,640	96,907	59,090	(1.83)%
Total		50,988	\$2,308,321	\$45,272	2.35 %

	Fiscal Year	Active Members#	Valuation Payroll	Average Compensation	% Inc.*
Employees	2007	26,474	\$ 942,319	\$35,594	3.40 %
Teachers		18,477	922,308	49,917	4.06 %
Police		4,263	233,348	54,738	6.32 %
Fire		1,588	97,364	61,312	3.78 %
Total		50,802	\$2,195,339	43,214	3.91 %

# Excludes temporary inactive members.

\* Average annual increase.

## Summary of Membership Data by Category

	June 30	
	2008	2007
<b>Active Members</b>		
Number	50,988	50,802
Average age (years)	45.7	45.6
Average service (years)	10.6	10.6
Average salary	\$ 45,272	\$ 43,214
Total payroll supplied, annualized	\$ 2,308,320,669	\$ 2,195,339,382
<b>Vested Inactive Members</b>		
Number	1,423	1,049
Average age (years)	52	52
<b>Non-Vested Inactive Members</b>		
Number	3,332	4,717
<b>Service Retirees</b>		
Number	19,510	18,008
Average age (years)	68	68
Total annual benefits	\$ 351,619,909	\$ 311,317,948
Average annual benefit	\$ 18,023	\$ 17,288
<b>Disability Retirees</b>		
Number	1,432	1,420
Average age (years)	60	60
Total annual benefits	\$ 25,188,738	\$ 24,496,655
Average annual benefit	\$ 17,590	\$ 17,251
<b>Beneficiaries</b>		
Number	1,928	1,820
Average age (years)	72	72
Total annual benefits	\$ 23,631,586	\$ 21,948,257
Average annual benefit	\$ 12,257	\$ 12,059
<b>Total Covered Lives</b>	<b>75,281</b>	<b>73,099</b>



## Other Schedules of Interest

### Distribution of Retirees by Years of Service

	<b>Employees</b>							
Service	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs.</u>	<u>Total</u>
Average monthly benefit	\$314	\$368	\$538	\$785	\$1,070	\$1,428	\$2,096	\$948
Average final average salary	\$30,781	\$36,237	\$35,989	\$39,536	\$42,625	\$47,998	\$57,600	\$42,962
Number of retired members	838	1,268	2,940	1,896	1,786	1,058	1,794	11,580 **

\* Includes 121 members who did not have service reported.

\*\* Includes 8,377 members who did not have FAS reported.

	<b>Teachers</b>							
Service	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs.</u>	<u>Total</u>
Average monthly benefit	\$418	\$457	\$636	\$966	\$1,381	\$1,789	\$2,528	\$1,674
Average final average salary	\$48,040	\$53,161	\$42,990	\$50,213	\$56,717	\$60,162	\$65,739	\$58,253
Number of retired members	137	171	929	886	1,531	1,347	2,653	7,654 **

\* Includes 59 members who did not have service reported.

\*\* Includes 5,208 members who did not have FAS reported.

	<b>Police</b>							
Service	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs.</u>	<u>Total</u>
Average monthly benefit	\$904	\$1,319	\$1,447	\$2,012	\$2,757	\$3,631	\$4,802	\$2,580
Average final average salary	\$42,170	\$50,113	\$45,063	\$57,239	\$69,092	\$80,884	\$87,128	\$69,835
Number of retired members	191	137	281	221	1,044	424	138	2,436 **

\* Includes 106 members who did not have service reported.

\*\* Includes 1,806 members who did not have FAS reported.

	<b>Fire</b>							
Service	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs.</u>	<u>Total</u>
Average monthly benefit	\$958	\$1,438	\$1,545	\$1,958	\$2,488	\$3,661	\$4,526	\$2,743
Average final average salary	\$55,668	\$42,455	\$46,301	\$64,705	\$69,420	\$83,187	\$87,553	\$76,307
Number of retired members	74	27	70	105	523	287	114	1,200 **

\* Includes 56 members who did not have service reported.

\*\* Includes 966 members who did not have FAS reported.

**Other Schedules of Interest**  
**Schedule of Retired Members by Type of Benefits**

**Employees**

<b>June 30, 2008</b>																			
		<b>Type of Retirement**</b>								<b>Option Selected #</b>									
<b>Amount of Monthly Benefit</b>	<b>Number of Retirants*</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>No Option</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>Other&amp;</b>
\$1 - 500	3,951	3,280	54	-	5	-	504	108	2,403	265	262	66	695	142	9	1	-	-	108
501 - 1,000	3,659	2,753	241	157	5	2	327	174	2,042	196	227	92	674	245	6	3	-	-	174
1,001 - 1,500	2,196	1,544	53	204	4	4	114	273	996	109	161	75	400	177	2	3	-	-	273
1,501 - 2,000	1,155	886	14	63	3	2	56	131	468	38	113	45	274	84	2	-	-	-	131
2,001 - 2,500	631	525	3	16	-	2	41	44	236	19	54	26	197	54	-	1	-	-	44
2,501 - 3,000	342	294	2	7	-	1	21	17	108	14	41	15	97	49	-	1	-	-	17
3,001 - 3,500	166	152	1	1	-	-	10	2	51	6	31	9	48	19	-	-	-	-	2
3,501 - 4,000	119	116	-	1	-	-	2	-	35	3	12	9	45	15	-	-	-	-	-
Over 4,000	110	107	1	-	-	-	2	-	20	3	19	12	38	16	1	1	-	-	-
<b>Totals</b>	<b>12,329</b>	<b>9,657</b>	<b>369</b>	<b>449</b>	<b>17</b>	<b>11</b>	<b>1,077</b>	<b>749</b>	<b>6,359</b>	<b>653</b>	<b>920</b>	<b>349</b>	<b>2,468</b>	<b>801</b>	<b>20</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>749</b>

**Teachers**

<b>June 30, 2008</b>																			
		<b>Type of Retirement**</b>								<b>Option Selected #</b>									
<b>Amount of Monthly Benefit</b>	<b>Number of Retirants*</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>No Option</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>Other&amp;</b>
\$1 - 500	911	773	-	-	-	-	53	85	464	70	43	15	178	49	2	5	-	-	85
501 - 1,000	1,343	1,121	61	-	1	-	79	81	723	159	61	26	235	55	3	-	-	-	81
1,001 - 1,500	1,509	1,130	62	6	4	-	60	247	636	88	92	41	299	105	1	-	-	-	247
1,501 - 2,000	1,431	1,236	22	6	4	1	44	118	584	71	108	37	373	134	1	5	-	-	118
2,001 - 2,500	1,279	1,158	19	4	1	1	38	58	513	54	83	42	385	140	1	3	-	-	58
2,501 - 3,000	877	845	-	1	1	-	19	11	344	34	75	30	272	107	-	4	-	-	11
3,001 - 3,500	549	529	1	-	1	-	15	3	243	29	48	21	155	48	1	1	-	-	3
3,501 - 4,000	223	214	-	-	1	-	8	-	87	15	19	10	65	27	-	-	-	-	-
Over 4,000	135	134	-	-	-	-	1	-	52	6	13	5	39	20	-	-	-	-	-
<b>Totals</b>	<b>8,257</b>	<b>7,140</b>	<b>165</b>	<b>17</b>	<b>13</b>	<b>2</b>	<b>317</b>	<b>603</b>	<b>3,646</b>	<b>526</b>	<b>542</b>	<b>227</b>	<b>2,001</b>	<b>685</b>	<b>9</b>	<b>18</b>	<b>-</b>	<b>-</b>	<b>603</b>

See Page 52 for footnotes.

Other Schedules of Interest  
Schedule of Retired Members by Type of Benefits

June 30, 2008																			
		Type of Retirement**								Option Selected #									
Amount of Monthly Benefit	Number of Retirants*	1	2	3	4	5	6	7	No Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - 500	141	100	1	-	-	3	26	11	80	1	6	15	7	21	-	-	-	-	11
501 - 1,000	274	145	11	5	-	2	102	9	198	11	12	12	11	21	-	-	-	-	9
1,001 - 1,500	274	160	22	12	-	2	68	10	171	12	11	11	20	39	-	-	-	-	10
1,501 - 2,000	299	191	14	45	-	1	28	20	159	20	8	31	15	45	1	-	-	-	20
2,001 - 2,500	338	240	3	70	-	3	14	8	155	22	12	40	21	80	-	-	-	-	8
2,501 - 3,000	301	226	-	59	-	1	14	1	129	18	5	47	12	89	-	-	-	-	1
3,001 - 3,500	240	201	-	32	1	2	3	1	81	17	2	65	5	69	-	-	-	-	1
3,501 - 4,000	197	181	-	11	-	-	5	-	64	8	3	44	9	69	-	-	-	-	-
Over 4,000	432	401	-	24	-	1	6	-	110	10	4	131	11	166	-	-	-	-	-
Totals	2,496	1,845	51	258	1	15	266	60	1,147	119	63	396	111	599	1	-	-	-	60

June 30, 2008																			
		Type of Retirement**								Option Selected #									
Amount of Monthly Benefit	Number of Retirants*	1	2	3	4	5	6	7	No Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - 500	37	22	-	1	-	2	11	1	24	-	2	1	2	7	-	-	-	-	1
501 - 1,000	84	28	1	-	-	-	53	2	73	-	1	2	1	5	-	-	-	-	2
1,001 - 1,500	151	60	7	14	-	5	65	-	115	11	8	6	5	6	-	-	-	-	-
1,501 - 2,000	149	87	10	18	-	2	29	3	88	13	7	14	11	13	-	-	-	-	3
2,001 - 2,500	175	124	2	25	1	3	16	4	79	15	8	24	6	39	-	-	-	-	4
2,501 - 3,000	148	115	2	24	-	1	5	1	53	8	2	29	8	47	-	-	-	-	1
3,001 - 3,500	128	119	1	7	-	-	1	-	37	7	2	26	2	54	-	-	-	-	-
3,501 - 4,000	104	92	-	7	1	1	3	-	28	6	2	20	1	47	-	-	-	-	-
Over 4,000	235	221	-	4	-	-	10	-	73	9	1	54	3	94	-	1	-	-	-
Totals	1,211	868	23	100	2	14	193	11	570	69	33	176	39	312	-	1	-	-	11

See Page 52 for footnotes.

## \*\*Type of Retirement

- 1-Service & early retirement
- 2-Ordinary disability retirement
- 3-Accidental disability retirement
- 4-Ordinary death in active service
- 5-Accidental death in active service
- 6-Beneficiaries of deceased members who retired on a service or disability allowance
- 7-Vested member with future benefit

## #Option Selected

- No option - Straight life
- Option 1 - Cash refund
- Option 2 - 100% Joint & Survivorship
- Option 3 - 50% Joint & Survivorship
- Option 4 - 100% Pop-Up
- Option 5 - 50% Pop-Up
- Option 6 - Other % Joint & Survivorship
- Option 7 - Other % Pop-Up
- Option 8 - Fixed amount to Beneficiaries
- Option 9 - Widow's benefit (accidental disability) 50%

\* Excluding Vested members with a future benefit  
& Elections for Vested members are made at the time of commencement

**Other Schedules of Interest**  
**Distribution of Retirees by Years of Service**  
**Medical Benefits**

Service	<b>State Employees</b>							Total
	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs</u>	
Average monthly benefit	\$405	\$499	\$437	\$414	\$392	\$399	\$427	\$413
Annual Benefits	\$889,207	\$419,431	\$509,140	\$223,432	\$2,815,199	\$2,051,632	\$4,628,374	\$11,536,415
Number of retired members	183	70	97	45	599	429	904	2,327

\* Includes 99 members who did not have service reported.

Service	<b>Political Subdivision Employees</b>							Total
	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs</u>	
Average monthly benefit	\$327	\$373	\$472	\$390	\$423	\$416	\$512	\$443
Annual Benefits	\$62,810	\$49,275	\$73,661	\$18,717	\$2,789,673	\$1,334,025	\$1,879,964	\$6,208,125
Number of retired members	16	11	13	4	550	267	306	1,167

\* Includes 9 members who did not have service reported.

Service	<b>Teachers</b>							Total
	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs</u>	
Average monthly benefit	\$336	\$376	\$484	\$474	\$420	\$438	\$513	\$474
Annual Benefits	\$28,218	\$4,507	\$23,224	\$11,368	\$4,291,716	\$4,272,401	\$12,376,720	\$21,008,154
Number of retired members	7	1	4	2	851	813	2,012	3,690

\* Includes 7 members who did not have service reported.

Service	<b>Police and Fire</b>							Total
	<u>0 - 4 yrs.*</u>	<u>5 - 9 yrs.</u>	<u>10 - 14 yrs.</u>	<u>15 - 19 yrs.</u>	<u>20 - 24 yrs.</u>	<u>25 - 29 yrs.</u>	<u>30 or more yrs</u>	
Average monthly benefit	\$438	\$480	\$493	\$471	\$551	\$559	\$527	\$535
Annual Benefits	\$331,421	\$512,554	\$1,047,356	\$982,995	\$7,565,509	\$3,682,116	\$1,283,509	\$15,405,460
Number of retired members	63	89	177	174	1,145	549	203	2,400

\* Includes 17 members who did not have service reported.

Other Schedules of Interest  
 Schedule of Retired Members by Type of Benefits  
 Medical Benefits

**State Employees**

June 30, 2008					
Monthly Benefit	No. of Retirants	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-500	1,862	190	1,628	1	43
501-1,000	462	59	161	209	33
1,001-1,500	2	0	1	0	1
1,501-2,000	1	1	0	0	0
Over \$2,000	0	0	0	0	0
Total	2,327	250	1,790	210	77

**Political Subdivision Employees**

June 30, 2008					
Monthly Benefit	No. of Retirants	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-500	851	115	735	1	0
501-1,000	305	108	90	96	11
1,001-1,500	11	2	0	9	0
1,501-2,000	0	0	0	0	0
Over \$2,000	0	0	0	0	0
Total	1,167	225	825	106	11

Other Schedules of Interest  
 Schedule of Retired Members by Type of Benefits  
 Medical Benefits

**Teachers**

June 30, 2008					
Monthly Benefit	No. of Retirants	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-500	2,513	516	1,981	4	12
501-1,000	1,058	408	240	293	117
1,001-1,500	118	30	6	71	11
1,501-2,000	1	1	0	0	0
Over \$2,000	0	0	0	0	0
Total	3,690	955	2,227	368	140

**Police and Fire**

June 30, 2008					
Monthly Benefit	No. of Retirants	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-500	1,243	370	850	15	8
501-1,000	1,135	150	158	814	13
1,001-1,500	20	4	2	12	2
1,501-2,000	2	1	0	1	0
Over \$2,000	0	0	0	0	0
Total	2,400	525	1,010	842	23

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**SECTION F**  
METHODS & ASSUMPTIONS

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## Valuation Methods

### Pension

**Actuarial Cost Method** - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gain/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

**Financing of Unfunded Actuarial Accrued Liabilities** - Unfunded Actuarial Accrued Liabilities were amortized by level (principal & interest combined) percent-of-payroll contributions over 28 years from the contribution effective date (Fiscal Year 2012).

### Health

Liabilities are determined under the entry-age actuarial cost method.

Contribution rates to the 401(h) sub-trust are determined as the lesser of 25% of the employers' total contributions or the actuarial required contribution rate that keeps the medical subsidy sub-trust solvent (the "solvency rate").

## Valuation Methods

***Actuarial Value of Assets*** - The Actuarial Value of Assets recognizes assumed investment return fully each year. Differences between actual and assumed investment income are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than Market Value. The Funding Value of Assets is unbiased with respect to Market Value. At any time it may be either greater or less than Market Value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to Market Value. Funding Value was limited to a 20% corridor around the Market Value.

The actuarial value of assets, net of the Special Account, was allocated to the pension and health plans based on the market value of those plans, net of the special account. The actuarial value of assets was then further allocated to each fund (either pension or health) based on the market value of those funds, net of the Special Account.

For purposes of determining the solvency rate, the market value of assets was used for Group I funds due to the short time horizon before these closed group funds become pay-as-you-go with a declining annual obligation.

## Development of Amortization Payment

The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The unfunded actuarial accrued liability (UAAL) was determined using the funding value of assets and actuarial accrued liability calculated as of the valuation date. The UAAL amortization payment (one component of the contribution requirement), is the level percent of pay required to fully amortize the UAAL over a 30 year period beginning on July 1, 2009. This UAAL payment reflects any payments expected to be made and interest to be accrued between the valuation date and the date contributions determined by this report are scheduled to begin. It was assumed that the entire pension contribution as calculated in the June 30, 2006 valuation would be contributed to the net pension assets.

## Valuation Assumptions

*The actuarial assumptions used* in the valuation are shown in this Section.

## Economic Assumptions

*The investment return rate* assumed in the valuations is 8.50% per year, compounded annually (net after investment expenses).

The **Wage Inflation Rate** assumed in this valuation was 4.50% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macro economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

No specific **Price Inflation** assumption is required to perform this valuation, since there are no benefits that are linked to price increases. However, a price inflation assumption on the order of 3.5% would be consistent with the other economic assumptions.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed total wage growth rate. Considering other economic assumptions, the 8.50% investment return rate translates to an assumed real rate of return over wage inflation of 4.00%. The assumed real rate of return over price inflation would be higher – on the order of 5.0%, considering both an inflation assumption and an average expense provision.

The active member population is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at the wage inflation rate – 4.50% per year.

*Pay increase assumptions* for individual active members are shown for sample ages on pages 60, 64, 68 and 72. Part of the assumption for each age is for merit and/or seniority increase, and the other 4.50% recognizes wage inflation, including price inflation, productivity increases, and other macro economic forces.

## Valuation Assumptions

### Employees

*The rates of salary increase* used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

Sample Ages	% Increase in Salary at Sample Ages		
	Merit & Seniority	Base (Economy)	Increase Next Year
20	11.75%	4.50%	16.25%
25	8.75%	4.50%	13.25%
30	4.25%	4.50%	8.75%
35	3.25%	4.50%	7.75%
40	1.85%	4.50%	6.35%
45	1.65%	4.50%	6.15%
50	1.45%	4.50%	5.95%
55	1.25%	4.50%	5.75%
60	1.05%	4.50%	5.55%
Ref:	271 - 0.5%		

## Valuation Assumptions

### Employees (Continued)

*The standard mortality table for death after retirement* was the table below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
35	0.076%	0.047%	46.65	51.20
40	0.102%	0.062%	41.82	46.32
45	0.151%	0.099%	37.02	41.46
50	0.235%	0.155%	32.28	36.65
55	0.387%	0.226%	27.64	31.92
60	0.735%	0.360%	23.14	27.25
65	1.408%	0.779%	18.92	22.71
70	2.485%	1.562%	15.12	18.52
75	4.176%	2.566%	11.81	14.83
80	6.934%	4.195%	9.02	11.53
Ref:	470	x 1.00	471	x 1.00

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

Disabled pension mortality was based on PBGC Disabled Mortality tables. For active members dying before retirement, 98% percent are assumed to be ordinary death and 2% percent are assumed to be accidental death. The probabilities of dying prior to retirement at sample attained ages were as follows:

Sample Ages	Probability of Occurrence Next Year			
	Death Before Retirement		Disabled Death	
	Men	Women	Men	Women
20	0.06%	0.02%	4.83%	4.83%
25	0.06%	0.02%	4.83%	4.83%
30	0.06%	0.03%	3.62%	3.62%
35	0.06%	0.04%	2.78%	2.78%
40	0.06%	0.07%	2.82%	2.82%
45	0.10%	0.10%	3.22%	3.22%
50	0.15%	0.14%	3.83%	3.83%
55	0.20%	0.18%	4.82%	4.82%
Ref	490	x 1.00	491	x 1.00
			250	250

## Valuation Assumptions

### Employees (Continued)

*The rates of retirement* used to measure the probability of eligible members retiring during the next year were as follows:

Retirement Ages	% of Active Members Retiring Within Next Year	
	Male	Female
60	12.50%	13.00%
61	15.00%	15.00%
62	17.00%	17.00%
63	19.00%	18.00%
64	21.00%	18.50%
65	24.00%	19.00%
66	26.00%	19.50%
67	24.00%	19.00%
68	22.00%	18.00%
69	20.00%	17.00%
70	100.00%	100.00%
Ref.	1386	1387

*Rates of separation from active membership* were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Sample Ages	% of Active Members Separating Within Next Year	
	Male	Female
25	7.00%	8.00%
30	6.50%	7.00%
35	5.50%	6.00%
40	4.50%	5.00%
45	4.00%	4.00%
50	3.50%	3.50%
55	3.00%	3.00%
60	2.20%	2.60%
Ref.	949	950

Withdrawal rates for the first two years of employment are multiplied by 2.0.

## Valuation Assumptions

### Employees (Concluded)

*Rates of disability* among active members. 50% are assumed to be ordinary disability and 50% are assumed to be accidental disability.

Sample Ages	% of Active Members Becoming Disabled Within Next Year	
	Men	Women
20	0.03%	0.02%
25	0.04%	0.02%
30	0.05%	0.02%
35	0.10%	0.05%
40	0.18%	0.08%
45	0.22%	0.12%
50	0.27%	0.18%
55	0.29%	0.22%
Ref	489	490



## Valuation Assumptions

### Teachers

*The rates of salary increase* used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

<b>Salary Increase Assumptions For an Individual Member</b>			
<b>Sample Ages</b>	<b>Merit &amp; Seniority</b>	<b>Base (Economy)</b>	<b>Increase Next Year</b>
20	3.75%	4.50%	8.25%
25	3.75%	4.50%	8.25%
30	2.00%	4.50%	6.50%
35	1.50%	4.50%	6.00%
40	1.00%	4.50%	5.50%
45	0.50%	4.50%	5.00%
50	0.00%	4.50%	4.50%
55	0.00%	4.50%	4.50%
60	0.00%	4.50%	4.50%
Ref:	272 - 0.5%		

## Valuation Assumptions

### Teachers (Continued)

*The standard mortality table for death after retirement* was the table below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
35	0.068%	0.044%	43.75	50.23
40	0.085%	0.058%	38.94	45.34
45	0.118%	0.090%	34.17	40.49
50	0.180%	0.143%	29.48	35.70
55	0.283%	0.211%	24.91	30.98
60	0.494%	0.319%	20.56	26.33
65	0.959%	0.661%	16.58	21.84
70	1.787%	1.389%	13.07	17.75
75	3.062%	2.335%	10.07	14.14
80	5.129%	3.789%	7.63	10.93
Ref:	470	x 1.00	471	x 1.00

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

Disabled pension mortality was based on PBGC Disabled Mortality tables. For active members dying before retirement, 98% percent are assumed to be ordinary death and 2% percent are assumed to be accidental death. The probabilities of dying at sample attained ages were as follows:

Sample Ages	Probability of Dying Next Year			
	Death Before Retirement		Disabled Death	
	Men	Women	Men	Women
20	0.02%	0.03%	4.83%	4.83%
25	0.02%	0.03%	4.83%	4.83%
30	0.03%	0.03%	3.62%	3.62%
35	0.04%	0.03%	2.78%	2.78%
40	0.05%	0.05%	2.82%	2.82%
45	0.06%	0.05%	3.22%	3.22%
50	0.12%	0.10%	3.83%	3.83%
55	0.18%	0.15%	4.82%	4.82%
Ref	492	x 1.00	493	x 1.00
			250	250

## Valuation Assumptions

### Teachers (Continued)

*The rates of retirement* used to measure the probability of eligible members retiring during the next year were as follows:

Retirement Ages	% of Active Members Retiring Within Next Year	
	Male	Female
60	20.50%	15.00%
61	22.00%	18.00%
62	23.00%	20.00%
63	24.00%	23.00%
64	25.00%	24.00%
65	26.00%	25.00%
66	27.00%	26.00%
67	28.00%	27.00%
68	29.00%	28.00%
69	30.00%	29.00%
70	100.00%	100.00%
Ref.	1388	1389

*Rates of separation from active membership* were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Sample Ages	% of Active Members Separating Within Next Year	
	Male	Female
25	4.50%	4.50%
30	4.00%	4.00%
35	3.50%	3.50%
40	2.75%	3.00%
45	2.75%	2.00%
50	3.50%	2.50%
55	4.00%	3.50%
60	4.40%	3.90%
Ref.	951	952

Withdrawal rates for the first year of employment are multiplied by 3.0 and for the second year of employment are multiplied by 2.0.

## Valuation Assumptions

### Teachers (Concluded)

*Rates of disability* among active members. 92% percent are assumed to be ordinary disability and 8% percent are assumed to be accidental disability.

Sample Ages	% of Active Members Becoming Disabled Within Next Year	
	Male	Female
20	0.005%	0.005%
25	0.005%	0.005%
30	0.005%	0.005%
35	0.005%	0.005%
40	0.005%	0.005%
45	0.015%	0.015%
50	0.050%	0.045%
55	0.200%	0.100%
Ref	491	492

## Valuation Assumptions

### Police

*The rates of salary increase* used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

<b>Salary Increase Assumptions For an Individual Member</b>			
<b>Sample Ages</b>	<b>Merit &amp; Seniority</b>	<b>Base (Economy)</b>	<b>Increase Next Year</b>
20	7.75%	4.50%	12.25%
25	7.75%	4.50%	12.25%
30	3.25%	4.50%	7.75%
35	2.00%	4.50%	6.50%
40	0.75%	4.50%	5.25%
45	0.75%	4.50%	5.25%
50	0.75%	4.50%	5.25%
55	0.75%	4.50%	5.25%
60	0.75%	4.50%	5.25%
Ref:	273 - 0.5%		

## Valuation Assumptions

### Police (Continued)

*The standard mortality table for death after retirement* was the table below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)			
	Men	Women	Men	Women		
35	0.076%	0.047%	46.65	51.20		
40	0.102%	0.062%	41.82	46.32		
45	0.151%	0.099%	37.02	41.46		
50	0.235%	0.155%	32.28	36.65		
55	0.387%	0.226%	27.64	31.92		
60	0.735%	0.360%	23.14	27.25		
65	1.408%	0.779%	18.92	22.71		
70	2.485%	1.562%	15.12	18.52		
75	4.176%	2.566%	11.81	14.83		
80	6.934%	4.195%	9.02	11.53		
Ref:	470	x	1.00	471	x	1.00

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

Disabled pension mortality was based on PBGC Disabled Mortality tables. For active members dying before retirement and disabled retirees, the probabilities of dying at sample attained ages were as follows:

Sample Ages	Probability of Dying Next Year							
	Death Before Retirement		Disabled Death					
	Men	Women	Men	Women				
20	0.04%	0.04%	4.83%	4.83%				
25	0.05%	0.05%	4.83%	4.83%				
30	0.06%	0.06%	3.62%	3.62%				
35	0.07%	0.07%	2.78%	2.78%				
40	0.10%	0.10%	2.82%	2.82%				
45	0.14%	0.14%	3.22%	3.22%				
50	0.16%	0.16%	3.83%	3.83%				
55	0.24%	0.24%	4.82%	4.82%				
Ref	494	x	1.00	494	x	1.00	250	250

## Valuation Assumptions

### Police (Continued)

*The rates of retirement* used to measure the probability of eligible members retiring during the next year were as follows:

<b>Retirement</b>	
<b>Ages</b>	<b>Percent</b>
45	27.00%
46	27.60%
47	28.20%
48	28.80%
49	29.40%
50	30.00%
51	30.60%
52	31.20%
53	31.80%
54	32.40%
55	33.00%
56	30.00%
57	28.75%
58	28.00%
59	27.50%
60	27.00%
61	26.67%
62	27.08%
63	27.50%
64	27.92%
65	28.33%
66	28.75%
67	29.17%
68	29.58%
69	30.00%
70	100.00%
Ref.	1390

## Valuation Assumptions

### Police (Concluded)

*Rates of separation from active membership* were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Sample Ages	Years of Service	% of Active Members Separating Within Next Year	
		Male	Female
25	5 & Over	5.50%	5.50%
30		4.50%	4.50%
35		3.50%	3.50%
40		3.00%	3.00%
45		3.00%	3.00%
50		3.00%	3.00%
55		2.00%	2.00%
60		2.00%	2.00%
Ref.		953	953

*Rates of disability* among active members.

Sample Ages	% of Active Members Becoming Disabled within Next Year	
	Ordinary	Accidental
20	0.00%	0.01%
25	0.01%	0.01%
30	0.02%	0.01%
35	0.02%	0.15%
40	0.06%	0.20%
45	0.14%	0.25%
50	0.20%	0.30%
55	0.36%	0.35%
Ref.	493	494



## Valuation Assumptions

### Fire

*The rates of salary increase* used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

<b>Salary Increase Assumptions For an Individual Member</b>			
<b>Sample Ages</b>	<b>Merit &amp; Seniority</b>	<b>Base (Economy)</b>	<b>Increase Next Year</b>
20	9.00%	4.50%	13.50%
25	8.00%	4.50%	12.50%
30	5.00%	4.50%	9.50%
35	3.00%	4.50%	7.50%
40	1.25%	4.50%	5.75%
45	1.25%	4.50%	5.75%
50	1.25%	4.50%	5.75%
55	1.25%	4.50%	5.75%
60	1.25%	4.50%	5.75%
Ref:	274 - 0.5%		

## Valuation Assumptions

### Fire (Continued)

*The standard mortality table for death after retirement* was the table below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)			
	Men	Women	Men	Women		
35	0.098%	0.054%	41.11	49.22		
40	0.100%	0.067%	36.33	44.36		
45	0.128%	0.084%	31.61	39.52		
50	0.207%	0.123%	27.03	34.69		
55	0.338%	0.227%	22.59	29.95		
60	0.560%	0.444%	18.42	25.36		
65	1.024%	0.864%	14.67	21.04		
70	1.927%	1.555%	11.48	17.10		
75	3.425%	2.593%	8.87	13.58		
80	5.542%	4.325%	6.77	10.52		
Ref:	326	x	1.00	327	x	1.00

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

Disabled pension mortality was based on PBGC Disabled Mortality tables. For active members dying before retirement and disabled retirees, the probabilities of dying at sample attained ages were as follows:

Sample Ages	Probability of Dying Next Year							
	Death Before Retirement		Disabled Death					
	Men	Women	Men	Women				
20	0.03%	0.03%	4.83%	4.83%				
25	0.03%	0.03%	4.83%	4.83%				
30	0.04%	0.04%	3.62%	3.62%				
35	0.05%	0.05%	2.78%	2.78%				
40	0.07%	0.07%	2.82%	2.82%				
45	0.10%	0.10%	3.22%	3.22%				
50	0.11%	0.11%	3.83%	3.83%				
55	0.17%	0.17%	4.82%	4.82%				
Ref	496	x	1.00	496	x	1.00	250	250

## Valuation Assumptions

### Fire (Continued)

*The rates of retirement* used to measure the probability of eligible members retiring during the next year were as follows:

<b>Retirement</b>	
<b>Ages</b>	<b>Percent</b>
45	15.00%
46	15.00%
47	15.00%
48	15.00%
49	15.00%
50	15.00%
51	15.00%
52	15.00%
53	15.00%
54	15.00%
55	25.00%
56	26.00%
57	27.00%
58	28.00%
59	29.00%
60	30.00%
61	29.00%
62	28.00%
63	27.00%
64	26.00%
65	25.00%
66	25.00%
67	25.00%
68	25.00%
69	25.00%
70	100.00%
Ref.	1391

## Valuation Assumptions

### Fire (Concluded)

*Rates of separation from active membership* were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Sample Ages	Years of Service	% of Active Members Separating Within Next Year	
		Male	Female
25	5 & Over	1.00%	1.00%
30		1.00%	1.00%
35		1.00%	1.00%
40		1.00%	1.00%
45		1.00%	1.00%
50		1.00%	1.00%
55		1.00%	1.00%
60		1.00%	1.00%
Ref.		151	151

*Rates of disability* among active members.

Sample Ages	% of Active Members Becoming Disabled within Next Year	
	Ordinary	Accidental
20	0.02%	0.05%
25	0.02%	0.05%
30	0.02%	0.07%
35	0.02%	0.09%
40	0.02%	0.20%
45	0.02%	0.25%
50	0.02%	0.30%
55	0.02%	0.35%
Ref	274	496

## Miscellaneous and Technical Assumptions

<b><i>Administrative &amp; Investment Expenses</i></b>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the prior year's administrative expenses. Assumed administrative expenses are added to the Normal Cost, and were 0.35% of payroll in the June 30, 2008 valuation.
<b><i>Benefit Service</i></b>	Exact Fractional service is used to determine the amount of benefit payable.
<b><i>COLA</i></b>	None assumed.
<b><i>Decrement Operation</i></b>	Disability decrements do not operate during retirement eligibility. Only withdrawal operates in the select withdrawal period.
<b><i>Decrement Timing</i></b>	Normal and early retirement decrements for the Teachers group are assumed to occur at the beginning of the year. All other decrements for all groups were assumed to occur mid-year.
<b><i>Eligibility Testing</i></b>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<b><i>Forfeitures</i></b>	None. In other words, it is assumed that if a member is vested at termination of employment, the member will receive a vested benefit when the member reaches normal retirement eligibility.
<b><i>Gain Sharing</i></b>	When the plan becomes 85% funded, current statutes provide that 100% of investment return above 10.5% is to be transferred to the Special Account. Projections based on valuation assumptions suggest that this may begin to occur in approximately 2029. This effect was not included in the valuation and was judged to be small due to the length of time before gainsharing occurs. This is based upon current statutes.
<b><i>Incidence of Contributions</i></b>	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

<b><i>Liability Adjustments</i></b>	Normal, early and vesting retirement liabilities are increased by 7.5%, 8.5%, 10.6% and 11.2% for Employees, Teachers, Police and Fire respectively to account for lump sum payouts.
<b><i>Marriage Assumption</i></b>	Group I: 80% of males and 80% of females are assumed to be married for purposes of death-in-service benefits. Group II: 50% of males and 50% of females are assumed to be married for purposes of death-in-service and death after retirement benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
<b><i>Normal Form of Benefit</i></b>	Group I: The assumed normal form of benefit is a straight life benefit. Group II: The assumed normal form of benefit is straight life for single members and joint and 50% survivor for married members.
<b><i>Pay Increase Timing</i></b>	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
<b><i>Service Credit Accruals</i></b>	It is assumed that members accrue one year of service credit per year.

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**SECTION G**  
PLAN PROVISIONS

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## Plan Provisions – Group I

<b><i>Statute</i></b>	Amended and Restated under New Hampshire Revised Statutes Annotated (RSA) Chapter 100-A. Most recently amended under legislation passed in the year ending June 30, 2008.
<b><i>Effective Date</i></b>	July 1, 1967
<b><i>Plan Year</i></b>	July 1 through June 30
<b><i>Type of Plan</i></b>	Qualified, governmental defined benefit retirement plan; it is a single plan for financial reporting purposes.
<b><i>Eligibility Requirements</i></b>	Any employee or teacher becomes a Group I member as a condition of employment. Membership is optional for elected officials, officials appointed for fixed terms, unclassified state employees or employees of the general court.
<b><i>Creditable Service</i></b>	Service measured from date of employment to date of retirement or prior termination plus service credited under one or more of the predecessor systems.
<b><i>Earnable Compensation</i></b>	Full base rate of compensation paid plus any overtime pay, holiday and vacation pay, sick pay, longevity or severance pay, cost of living bonus, additional pay for extracurricular and instructional activities or for other extra or special duty, and other compensation paid to the member by the employer, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax. Earnable compensation in the final 12 months prior to termination shall be limited to 1 ½ times the higher of the earnable compensation in the 12 month period preceding the final 12 months or the highest compensation year excluding the final 12 months.
<b><i>Average Final Compensation (AFC)</i></b>	Average annual earnable compensation during the highest 3 years of creditable service.



## Plan Provisions – Group I

### ***Service Retirement***

Eligibility: Age 60 years.

Benefit: A member annuity that is the actuarial equivalent of the member's accumulated contributions plus a state annuity.

Prior to age 65, the state annuity, together with the member annuity, shall be equal to  $1/60^{\text{th}}$  of AFC times creditable service.

After age 65, the state annuity, together with the member annuity, shall be equal to  $1/66^{\text{th}}$  of AFC times creditable service.

Normal Form: straight life annuity.

### ***Early Retirement***

Eligibility: Completion of 20 years of creditable service and age plus service at least 70, or attainment of age 50.

Benefit: Service Retirement Benefit accrued to date of retirement, reduced for each month prior to age 60 by  $1/8$  of 1% if the member has 35 years or more of creditable service, by  $1/4$  of 1% if the member has 30 years but less than 35, by  $1/3$  of 1% if the member has at least 25 years but not 30, by  $5/12$  of 1% if the member has at least 20 years but not 25, and by  $5/9$  of 1% if the member has less than 20 years of creditable service.

### ***Ordinary Disability***

Eligibility: 10 or more years of creditable service.

Benefit: Service Retirement Benefit if at least age 60. Under age 60, a member annuity plus state annuity that shall be equal to 1.5% times AFC times years of creditable service. The disability retirement allowance shall not be less than 25% of AFC.

### ***Accidental Disability***

Eligibility: Permanently disabled in the performance of duty.

Benefit: Service Retirement Benefit if at least age 60, not less than 50% of AFC. Under age 60, a member annuity plus state annuity that shall be equal to 50% times AFC.

## Plan Provisions – Group I

***Accidental Death Benefits***

Eligibility: Accidental death in the performance of duty.

Benefit: 50% times AFC.

***Ordinary Death Benefits***

Eligibility: Death other than accidental death

Benefit: If 10 years creditable service or eligible for service retirement, surviving spouse receives 50% of the service retirement benefit until death or remarriage. If no surviving spouse, designated beneficiary receives a lump sum equal to the greater of \$3,600 or the member's annual compensation.

If less than 10 years creditable service and not eligible for service retirement, the member's spouse or designated beneficiary receives a lump sum equal to the greater of \$3,600 or the member's annual compensation.

***Post Retirement Death***

Not applicable.

***Optional Forms***

Each of the following options shall be of equivalent actuarial value to the allowance payable in the absence of election of an option.

Option 1. Full cash refund.

Option 2. 100% Joint and Survivor.

Option 3. 50% Joint and Survivor.

Option 4. Other Joint and Survivor.

***Vested Termination***

If a member terminates with less than 10 years of service, the Member's own contributions are refunded. If a Member terminates with 10 or more years of service, the Member either receives his service retirement or reduced early service retirement benefit beginning at any age after age 50 or the member may apply for a refund of accumulated contributions.

***Maximum Benefit***

Members hired before July 1, 2009: 100% x AFC.

Members hired on or after July 1, 2009: \$120,000 annually.

## Plan Provisions – Group I

***Refunds***

1. Termination for reasons other than retirement or death and the member has not elected a vested deferred retirement benefit.
2. Upon death in service other than accidental death described above, the member's accumulated contributions are payable to the beneficiary or estate.
3. Upon death prior to age 60 of a member electing vested deferred retirement, the member's accumulated contributions are payable to the beneficiary or estate.
4. Upon death of a retired member prior to electing an optional allowance, any excess of the member's accumulated contributions at retirement over the sum of retirement allowance payments received.

***Member Contributions***

5% of compensation

***Employer Contributions***

As prescribed in RSA 100-A:16.

***Cost of Living Increases***

Provided annually by the legislature out of a special reserve (Special Account) pursuant to RSA 100-A:41-a.

***Other Ancillary Benefits***

There are no ancillary benefits - retirement type benefits not required by statutes but which might be deemed a liability if continued beyond the availability of funding by the current funding source.

## Plan Provisions – Group II

<b><i>Statute</i></b>	Amended and Restated under New Hampshire Revised Statutes Annotated (RSA) Chapter 100-A. Most recently amended under legislation passed in the year ending June 30, 2008.
<b><i>Effective Date</i></b>	July 1, 1967
<b><i>Plan Year</i></b>	July 1 through June 30
<b><i>Type of Plan</i></b>	Qualified, governmental defined benefit retirement plan; it is a single plan for financial reporting purposes.
<b><i>Eligibility Requirements</i></b>	Any permanent policeman or permanent fireman becomes a Group II member as a condition of employment.
<b><i>Creditable Service</i></b>	Service measured from date of employment to date of retirement or prior termination plus service credited under one or more of the predecessor systems.
<b><i>Earnable Compensation</i></b>	Full base rate of compensation paid plus any overtime pay, holiday and vacation pay, sick pay, longevity or severance pay, cost of living bonus, additional pay for extracurricular and instructional activities or for other extra or special duty, and other compensation paid to the member by the employer, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax. Earnable compensation in the final 12 months prior to termination shall be limited to 1 ½ times the higher of the earnable compensation in the 12 month period preceding the final 12 months or the highest compensation year excluding the final 12 months.
<b><i>Average Final Compensation (AFC)</i></b>	Average annual earnable compensation during the highest 3 years of creditable service.

## Plan Provisions – Group II

### ***Service Retirement***

Eligibility: Age 45 and 20 years of creditable service or age 60.

Benefit: A member annuity that is the actuarial equivalent of the member's accumulated contributions plus a state annuity.

The state annuity, together with the member annuity, shall be equal to 2-1/2% of AFC times creditable service up to 40 years.

A member retiring at age 45 with 20 years of service shall receive a minimum annual service retirement allowance of \$10,000.

Normal Form: straight life annuity (with surviving spouse's benefit payable as described under post-retirement death benefit).

### ***Ordinary Disability***

Eligibility: 10 or more years of creditable service.

Benefit: Service Retirement Benefit. The disability retirement allowance shall not be less than 25% of the member's final compensation at the date of the member's disability.

### ***Accidental Disability***

Eligibility: Permanently disabled in the performance of duty.

Benefit: A member annuity plus state annuity that shall be equal to 2/3 of AFC. If a member has more than 26-2/3 years of service, a supplemental disability benefit equal to 2-1/2% of AFC times years of creditable service in excess of 26-2/3 years but not in excess of 40 years.

### ***Accidental Death Benefits***

Eligibility: Accidental death in the performance of duty.

Benefit: 50% times the member's annual rate of earnable compensation at the date of the member's death.

## Plan Provisions – Group II

### ***Ordinary Death Benefits***

Eligibility: Death other than accidental death.

Benefit: If 10 years creditable service or eligible for service retirement, surviving spouse receives 50% of the service retirement benefit until death or remarriage. If no surviving spouse, designated beneficiary receives a lump sum equal to the greater of \$3,600 or the member's annual compensation.

If less than 10 years creditable service and not eligible for service retirement, the member's spouse or designated beneficiary receives a lump sum equal to the greater of \$3,600 or the member's annual compensation.

### ***Post Retirement Death***

Retired prior to April 1, 1987, lump sum of \$3,600 or in the case of accidental disability, 50% of the accidental disability benefit payable to surviving spouse.

Retired on or after April 1, 1987, benefit payable to surviving spouse until death or remarriage equal to 50% of the member's service, ordinary disability or accidental disability retirement allowance plus a lump sum as defined below.

Retired on or after April 1, 1987, but before July 1, 1988, hired before July 1, 1988, lump sum of \$3,600.

Retired on or after July 1, 1988, hired before July 1, 1988, lump sum of \$10,000.

Retired on or after July 1, 1988, hired on or after July 1, 1988 but before July 1, 1993, lump sum of \$3,600.

### ***Optional Forms***

Each of the following options shall be of equivalent actuarial value to the straight life allowance payable in the absence of election of an option.

Option 1. Full cash refund.

Option 2. Not applicable.

Option 3. 50% Joint and Survivor.

Option 4. Other Joint and Survivor, not to exceed 50%.

### ***Vested Termination***

If a member terminates with less than 10 years of service, the Member's own contributions are refunded. If a Member terminates with 10 or more years of service, the Member either receives his service retirement at any age after age 45 provided the member would have completed 20 years of creditable service or age 60 or the member may apply for a refund of accumulated contributions.

### ***Maximum Benefit***

Members hired before July 1, 2009: 100% x AFC.

Members hired on or after July 1, 2009: \$120,000 annually.

## Plan Provisions – Group II

### ***Refunds***

1. Termination for reasons other than retirement or death and the member has not elected a vested deferred retirement benefit.
2. Upon death in service other than accidental death described above, the member's accumulated contributions are payable to the beneficiary or estate.
3. Upon death prior to commencement of benefits of a member electing vested deferred retirement, the member's accumulated contributions are payable to the beneficiary or estate.
4. Upon death of a survivor of a member retired on accidental disability with spouse receiving accidental disability survivor benefits, the excess of the member's accumulated contributions at retirement over the sum of payments received.
5. Upon death of a retired member prior to electing an optional allowance, any excess of the member's accumulated contributions at retirement over the sum of retirement allowance payments received.

### ***Member Contributions***

9.3% of compensation

### ***Employer Contributions***

As prescribed in RSA 100-A:16.

### ***Cost of Living Increases***

Provided annually by the legislature out of a special reserve (Special Account) pursuant to RSA 100-A:41-a.

### ***Other Ancillary Benefits***

There are no ancillary benefits - retirement type benefits not required by statutes but which might be deemed a liability if continued beyond the availability of funding by the current funding source.

## History of Recent Changes in Plan Provisions

### **2008 Legislative Session:**

Legislation was enacted in the 2008 legislative session which:

- (a) Eliminates the post-retirement health subsidy increases scheduled for July 1, 2008, July 1, 2009, July 1, 2010, and July 1, 2011. Beginning July 1, 2012, and on each July 1 thereafter, establishes an annual 4% compound increase in the post-retirement health subsidy payment;
- (b) Transfers \$250 million from the Special Account reserve to net pension assets;
- (c) Establishes contributions to the 401(h) sub-trust to be the lesser of 25% of the employers' contributions or the actuarial required contribution rate that keeps the medical subsidy sub-trust solvent (the "solvency rate");
- (d) Allows non-vested employees who leave employment (for reasons other than death or retirement) to leave their money in the system and continue to earn 2% below the actual rate of return on their funds for the period they are out of the system. These accumulated contributions shall be returned within three months of a former member filing a written request for such payment with the system. In the event a former member returns to membership status after a break in service, his or her previous service shall count toward that member's creditable service to the extent that his or her accumulated contributions have remained in the system;
- (e) Allows Employee and Teacher members of political subdivisions who are eligible to retire as of July 1, 2008, have at least 20 years of credited service as of July 1, 2008 and who actually retire on or before July 1, 2009 (extended from July 1, 2008) to be eligible for the medical subsidy. Members with less than 30 years of credited service are eligible to begin receiving subsidy benefits at age 60, members with 30 or more years of service are eligible to begin receiving subsidy benefits at age 55;
- (f) Establishes certain COLA payments, payable after June 30, 2008 and funded from the Special Account;
- (g) Incurs an anti-spiking surcharge to employers who allow employees to spike salaries at the end of their careers;
- (h) Establishes that the maximum retirement benefit granted under RSA 100-A:5 or RSA 100-A:6 for members hired after June 30, 2009 shall not exceed \$120,000 annually.



## History of Recent Changes in Plan Provisions

### **2007 Legislative Session:**

Legislation was enacted in the 2007 legislative session which:

- (a) Establishes that the maximum retirement benefit granted under RSA 100-A:5 or RSA 100-A:6 shall not exceed 100 percent of the member's highest year of earnable compensation.
- (b) Adds one person representing management in local government to the System's Board of Trustees.
- (c) Establishes that seven trustees constitute a quorum for the transaction of any business and that the Board chairman shall be a non-voting member except in the event of a tie vote.
- (d) Changes the System's actuarial funding methodology from open group aggregate to entry age normal.
- (e) Changes the amortization period for the System's unfunded accrued liability from 20 years to 30 years or the maximum period allowed by the Governmental Accounting Standards Board.
- (f) Restricts any assets from being transferred to the Special Account until such time as the actuary determines that the funded ratio of the consolidated retirement system as of June 30 of any given year is equal to or greater than 85%. Upon achievement of the 85% funded ratio, only returns in excess of 10 and one half percent will be allocated to the Special Account.
- (g) Removes a provision in RSA 100-A:16 II(h) that restricted the granting of additional benefits, other than COLA's, from being funded by Special Account assets unless there were reserves in the Special Account sufficient to pay for three years of COLA's at 5.0% per year.
- (h) Establishes that effective July 1, 2008, and as calculated each year thereafter, the annual employer contribution requirements shall not be less than the employee contribution rates specified under RAS 100-A-16, I(a).
- (i) Provided a 2.25% COLA for Employees, Teachers, Police Officers and Firefighters who retired prior to July 1, 2006, effective July 1, 2007.
- (j) Established a commission to make recommendations to ensure the long-term viability of the System.
- (k) Repealed the option to purchase nonqualified service credit in the System.

## Medical Plan Provisions

Subsidy Benefits as of July 1, 2008 are as follows:

	<b>Monthly Amounts</b>	
	<b>Pre-65</b>	<b>Post-65</b>
<b>Single</b>	\$375.56	\$236.84
<b>Couple</b>	\$751.12	\$473.68

The above amounts will increase by July 1 each year in accordance with the following table:

<b>July 1</b>	<b>Annual Increase %</b>
2008	0%
2009	0%
2010	0%
2011	0%
2012 and after	4%

The following Group I members and their qualified spouses are eligible for coverage under the postretirement medical plan:

- Employee and teacher members of political subdivisions who are eligible to retire as of July 1, 2008, on Service, Early Service or Ordinary Disability, have at least 20 years of credited service as of July 1, 2008 and who actually retire on or before July 1, 2009 would become eligible for the medical subsidy at age 60 with at least 20 years of creditable service; or as early as age 55 with at least 30 years of creditable service.
- Employee and teacher members of political subdivisions who retire on or before July 1, 2008, on Vested Deferred retirement would become eligible for the medical subsidy at age 60 with at least 20 years of creditable service; or as early as age 55 with at least 30 years of creditable service.
- Employee and teacher members of political subdivisions who retired on Accidental Disability Retirement on or before July 1, 2004.
- Employee members of the State who retired on or before July 1, 2004, on Service, Ordinary Disability or Vested Deferred Retirement would become eligible for the medical subsidy at age 60 with at least 20 years of creditable service; or as early as age 55 with at least 30 years of creditable service.
- Employee and teacher members of political subdivisions who retire on or before July 1, 2008, on Service, Early Service, Vested Deferred or Ordinary Disability retirement after completing at least 20 years of creditable service and who subsequently attain age 60 or after completing at least 30 years of creditable service and who subsequently attain age 55.
- Surviving spouses of deceased employee and teacher members of political subdivisions who die while in service, provided that such surviving spouse was covered as the member's spouse in the employer-sponsored plan before the member's death and is entitled to a monthly allowance under Accidental Death, Ordinary Death, or an Optional Allowance.

- Surviving spouses and children of employee and teacher members of political subdivisions who die as the natural and proximate result of injuries suffered while in the performance of duty. Eligibility for the medical subsidy ceases when the dependent child attains age 18 or age 23, if attending school on a full-time basis, or upon the spouse's remarriage.
- Surviving spouses and children of employee members of the State who died as the natural and proximate result of injuries suffered while in the performance of duty. Payment of the subsidy ceases when (i) the dependent child attains age 18 or age 23, if attending school on a full-time basis, or (ii) the spouse remarries.
- Vested terminated employee members of the State (and spouses) who completed at least 20 years of creditable service and prior to July 1, 2004 receives an allowance and who subsequently attains age 60.
- Employee members of the State (and spouses) who retire after completing at least 20 years of creditable service and who subsequently attains age 60 before July 1, 2004 or after completing at least 30 years of creditable service and who subsequently attains age 55 before July 1, 2004.
- Surviving spouses of deceased employee members of the State who died while in service on or before July 1, 2004, provided that such surviving spouse was covered as the member's spouse in the employer-sponsored plan before the member's death and is entitled to a monthly allowance under Accidental Death, Ordinary Death, or an Optional Allowance.
- Any certifiably dependent child with a disability living in the household and being cared for by the qualified retired member, member's spouse, or qualified surviving spouse would also qualify:

The following Group II members are eligible for the postretirement medical premium subsidy:

- Active or Retired Group II police officer members (or beneficiaries) as of June 30, 2000.
- Active or Retired Group II firefighter members (or beneficiaries) as of June 30, 2000.
- Persons who prior to July 1, 1988 had completed at least 20 years of Group II service and are eligible as of July 1, 1993 for a vested deferred retirement benefit.
- Group II members retired as of July 1, 1991 with a split benefit under RSA 100-A:19-c who have at least 10 years of Group II service.
- Group II members as of June 30, 2005 who subsequently became disabled while in the performance of duty at any time in the future.
- Surviving spouses of deceased Group II members who retired prior to April 1, 1987 and who are not receiving a monthly allowance.

The System subsidy covers the retired member's spouse and any of the retired member's certifiably dependent and disabled children.

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**SECTION H**  
GLOSSARY

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## Glossary

<b><i>Actuarial Accrued Liability (AAL)</i></b>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<b><i>Actuarial Assumptions</i></b>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<b><i>Actuarial Cost Method</i></b>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of future Normal Costs and the Actuarial Accrued Liability.
<b><i>Actuarial Equivalent</i></b>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<b><i>Actuarial Present Value (APV)</i></b>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<b><i>Actuarial Present Value of Future Benefits (APVFB)</i></b>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<b><i>Actuarial Valuation</i></b>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB Statement No. 25, such as the Funded Ratio and the Annual Required Contribution (ARC).
<b><i>Actuarial Value of Assets</i></b>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution (ARC).

## Glossary

<b><i>Amortization Method</i></b>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<b><i>Amortization Payment</i></b>	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b><i>Amortization Period</i></b>	The period used in calculating the Amortization Payment.
<b><i>Annual Required Contribution (ARC)</i></b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB Statement No. 25. The ARC consists of the Employer Normal Cost and Amortization Payment.
<b><i>Closed Amortization Period</i></b>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<b><i>Employer Normal Cost</i></b>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<b><i>Equivalent Single Amortization Period</i></b>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<b><i>Experience Gain/Loss</i></b>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

## Glossary

<b><i>Funded Ratio</i></b>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<b><i>GASB</i></b>	Governmental Accounting Standards Board.
<b><i>GASB No. 25 and GASB No. 27</i></b>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.
<b><i>Normal Cost</i></b>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<b><i>Open Amortization Period</i></b>	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
<b><i>Unfunded Actuarial Accrued Liability</i></b>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<b><i>Solvency Rate</i></b>	The minimum contribution necessary to prevent insolvency (a fund balance less than \$0).
<b><i>Valuation Date</i></b>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.