

NEW HAMPSHIRE RETIREMENT SYSTEM
ACTUARIAL VALUATION REPORT - FINAL
AS OF JUNE 30, 2013



November 18, 2013

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, 2013

Dear Board Members:

The results of the June 30, 2013 Annual Actuarial Valuation of the New Hampshire Retirement System (NHRS) are presented in this report. The purposes of this valuation were:

- to measure the System's funding progress;
- to determine actuarial information for reporting purposes in compliance with Governmental Accounting Standards Statements No. 25 and No. 43 for the 2013 fiscal year.

This report also provides preliminary information regarding the employer contribution rates for Fiscal Years 2016 and 2017.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. This report should not be relied on for any purpose other than the purpose described. Any draft versions of this report should not be relied upon.

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. We are not responsible for the accuracy or completeness of the data provided by NHRS.

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.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic and demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

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.

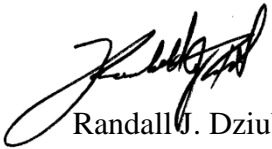
We certify that the information contained in this report is accurate and fairly presents the actuarial position of the New Hampshire Retirement System as of June 30, 2013. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

The actuaries submitting this report are independent of the plan sponsor and are Members of the American Academy of Actuaries (M.A.A.A.), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



David T. Kausch, F.S.A., E.A., M.A.A.A.



Randall J. Dziubek, A.S.A., E.A., M.A.A.A.



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SECTION A
INTRODUCTION

Highlights of June 30, 2013 Actuarial Valuation

Preliminary Employer Contribution Rates for the 2016/17 Biennium

	Computed Employer Contribution Rates as a Percent of Payroll				
	State Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.86%		22.54%	25.32%	12.40%
Medical Subsidy	1.64%		3.84%	3.84%	1.93%
Total	12.50%		26.38%	29.16%	14.33%

	Computed Employer Contribution Rates as a Percent of Payroll				
	Political Subdivision Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.86%	12.72%	22.54%	25.32%	13.88%
Medical Subsidy	0.31%	2.95%	3.84%	3.84%	2.29%
Total	11.17%	15.67%	26.38%	29.16%	16.17%

* The grand total contribution rates for NHRS (State and Political Subdivisions combined) are 13.55% of payroll for pension and 2.21% for the medical subsidy for a grand total of 15.76% of payroll. The rates shown above for the total State and total Political Subdivisions vary due to different proportions of payroll in the various member classifications.

The Funded Ratio (Actuarial Value of Assets divided by the Actuarial Accrued Liability) for NHRS in total is 56.7%.

Changes to the System included in the June 30, 2013 Actuarial Valuation:

- 1) In total, plan experience between June 30, 2012 and June 30, 2013 was favorable for pension and unfavorable for medical subsidy. The dollar weighted rate of return for the year ending June 30, 2013 was 14.38% on the market value of assets and 7.12% for the actuarial value of assets, resulting in a recognized asset loss of \$36 million (pension and medical subsidy combined). Total covered payroll increased by 0.56% versus the assumed increase of 3.75% resulting in pension liability gains. Between the 2012 and 2013 valuation, the pension funded ratio increased by 0.6% (56.1% to 56.7%). The 2016-2017 employer contribution rates determined by this valuation are 0.22% of payroll higher than the estimates from the June 30, 2012 valuation for NHRS in total (a decrease of 0.18% for pension and an increase of 0.40% for medical subsidy). See Comment 1 on page 15.
- 2) The medical subsidy benefits are effectively pay-as-you-go with total assets in the four subaccounts being roughly half a year's total benefit payments. The NHRS included additional data with the June 30, 2013 valuation data to be reviewed for potentially developing alternative approaches for computing the medical subsidy contribution rates. See Comment 2 on pages 15-16.

Details of the impact of changes can be found in the Discussion and Comments section.

Executive Summary Pension

Covered Group	Employees	Teachers	Police	Fire	Total
I. Number of Participants as of June 30, 2013					
a. Actives	24,809	18,084	4,187	1,608	48,688
b. Retirees, Disabilities, and Beneficiaries	14,712	10,407	3,163	1,447	29,729
c. Vested Terminations	656	548	51	6	1,261
d. Total	40,177	29,039	7,401	3,061	79,678
e. Total Covered Annual Payroll	\$1,079,245,024	\$1,039,933,370	\$ 266,775,297	\$ 115,788,017	\$ 2,501,741,708
II. Long Range Pension Cost					
a. Actuarial Present Value of Projected Benefits	\$4,260,082,577	\$4,848,022,350	\$2,319,980,958	\$1,138,852,073	\$12,566,937,958
b. Actuarial Present Value of Future Normal Costs	705,117,799	674,967,474	303,598,043	174,486,205	1,858,169,521
c. Actuarial Accrued Liability (AAL): a. – b.	3,554,964,778	4,173,054,876	2,016,382,915	964,365,868	10,708,768,437
d. Actuarial Value of Assets	1,977,479,160	2,255,011,456	1,236,578,584	601,612,058	6,070,681,258
e. Unfunded Actuarial Accrued Liability (UAAL): c. – d.	1,577,485,618	1,918,043,420	779,804,331	362,753,810	4,638,087,179
f. Funded Status (d. / c.)	55.6%	54.0%	61.3%	62.4%	56.7%
III. Additional Information on Payroll					
State	\$ 488,021,432	\$ -	\$ 69,484,154	\$ 3,730,233	\$ 561,235,819
Political Subdivisions	591,223,592	1,039,933,370	197,291,143	112,057,784	1,940,505,889
Total	\$ 1,079,245,024	\$ 1,039,933,370	\$ 266,775,297	\$ 115,788,017	\$ 2,501,741,708

Executive Summary
(Continued)
Preliminary Contribution Rates
Medical Subsidy

Covered Group	State Employees	Political Subdivision Employees	Teachers	Police and Fire	Grand Total
I. Number of Participants Covered by Post Retirement Medical Subsidy as of June 30, 2013					
a. Actives	-	-	-	5,795	5,795
b. Retirees, Disabilities, and Beneficiaries	1,944	1,344	4,390	2,586	10,264
c. Vested Terminations	-	-	-	-	-
d. Total	1,944	1,344	4,390	8,381	16,059
e. Total NHRS Covered Annual Payroll	\$ 488,021,432	\$ 591,223,592	\$ 1,039,933,370	\$ 382,563,314	\$ 2,501,741,708
II. Long Range Post-Retirement Medical Subsidy Cost					
a. Actuarial Present Value of Projected Benefits	\$ 81,643,039	\$ 67,667,310	\$ 245,464,701	\$ 355,969,486	\$ 750,744,536
b. Actuarial Present Value of Future Normal Costs	-	-	-	18,872,424	18,872,424
c. Actuarial Accrued Liability (AAL): a. – b.	81,643,039	67,667,310	245,464,701	337,097,062	731,872,112
d. Valuation Assets	94,597	23,356,205	(10,313,845)	8,686,330	21,823,287
e. Unfunded Actuarial Accrued Liability (UAAL): c. – d.	81,548,442	44,311,105	255,778,546	328,410,732	710,048,825
f. Funded Status	0.1%	34.5%	(4.2%)	2.6%	3.0%

Executive Summary
(Continued)
Preliminary Contribution Rates

State Members

Covered Group	Employees	Teachers	Police	Fire	Total
Current Cost					
Total Normal Cost (% of Covered Payroll)	9.14%		16.61%	18.36%	10.13%
UAAL Contribution (% of Payroll)	8.72%		17.48%	18.76%	9.87%
Total Pension Contribution (% of Payroll)	17.86%		34.09%	37.12%	20.00%
Fiscal Year 2016					
Member Contributions (% of Payroll)	7.00%		11.55%	11.80%	7.60%
Employer Pension Contribution (% of Payroll)	10.86%		22.54%	25.32%	12.40%
Employer Health Contribution (% of Payroll)	1.64%		3.84%	3.84%	1.93%
Total Contributions for Fiscal Year 2016					
1. Percent of Payroll	12.50%	N/A	26.38%	29.16%	14.33%
2. Estimated Dollar Amount	\$ 68,126,052	N/A	\$ 20,470,332	\$ 1,214,752	\$ 89,811,137
Fiscal Year 2017					
Member Contributions (% of Payroll)	7.00%		11.55%	11.80%	7.60%
Employer Pension Contribution (% of Payroll)	10.86%		22.54%	25.32%	12.40%
Employer Health Contribution (% of Payroll)	1.64%		3.84%	3.84%	1.93%
Total Contributions for Fiscal Year 2017					
1. Percent of Payroll	12.50%	N/A	26.38%	29.16%	14.33%
2. Estimated Dollar Amount	\$ 70,680,779	N/A	\$ 21,237,969	\$ 1,260,306	\$ 93,179,054

Executive Summary
(Continued)
Preliminary Contribution Rates

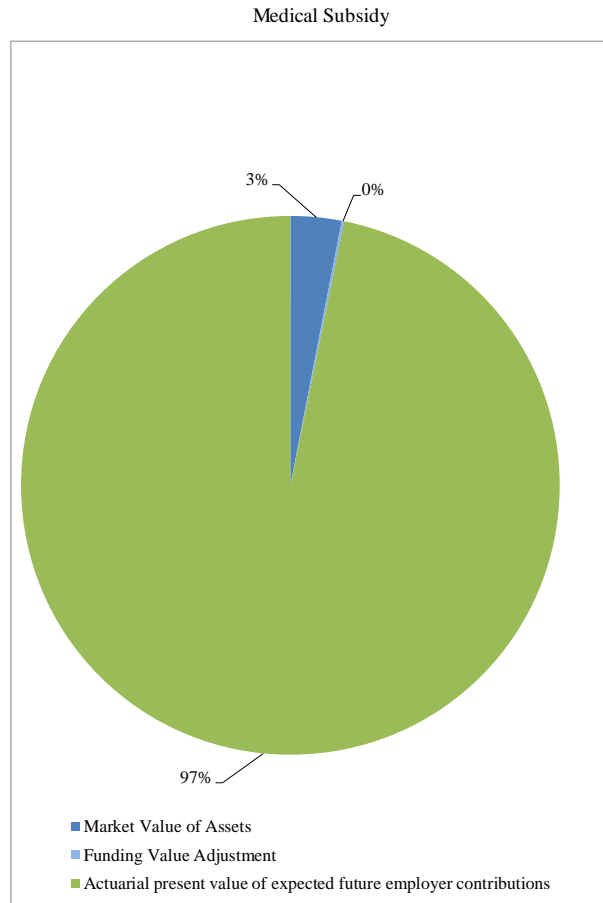
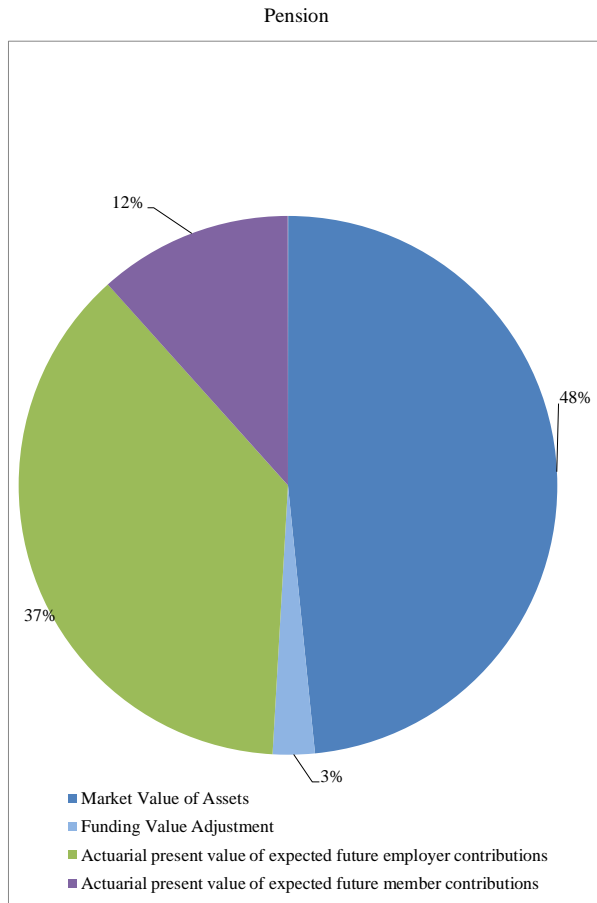
Political Subdivison Members

Covered Group	Employees	Teachers	Police	Fire	Total
Current Cost					
Total Normal Cost (% of Covered Payroll)	9.14%	8.69%	16.61%	18.36%	10.19%
UAAL Contribution (% of Payroll)	8.72%	11.03%	17.48%	18.76%	11.43%
Total Pension Contribution (% of Payroll)	17.86%	19.72%	34.09%	37.12%	21.62%
Fiscal Year 2016					
Member Contributions (% of Payroll)	7.00%	7.00%	11.55%	11.80%	7.74%
Employer Pension Contribution (% of Payroll)	10.86%	12.72%	22.54%	25.32%	13.88%
Employer Health Contribution (% of Payroll)	0.31%	2.95%	3.84%	3.84%	2.29%
Total Contributions for Fiscal Year					
1. Percent of Payroll	11.17%	15.67%	26.38%	29.16%	16.17%
2. Estimated Dollar Amount	\$ 73,751,226	\$ 181,986,355	\$ 58,122,823	\$ 36,491,681	\$ 350,352,085
Fiscal Year 2017					
Member Contributions (% of Payroll)	7.00%	7.00%	11.55%	11.80%	7.74%
Employer Pension Contribution (% of Payroll)	10.86%	12.72%	22.54%	25.32%	13.88%
Employer Health Contribution (% of Payroll)	0.31%	2.95%	3.84%	3.84%	2.29%
Total Contributions for Fiscal Year					
1. Percent of Payroll	11.17%	15.67%	26.38%	29.16%	16.17%
2. Estimated Dollar Amount	\$ 76,516,897	\$ 188,810,843	\$ 60,302,429	\$ 37,860,119	\$ 363,490,288

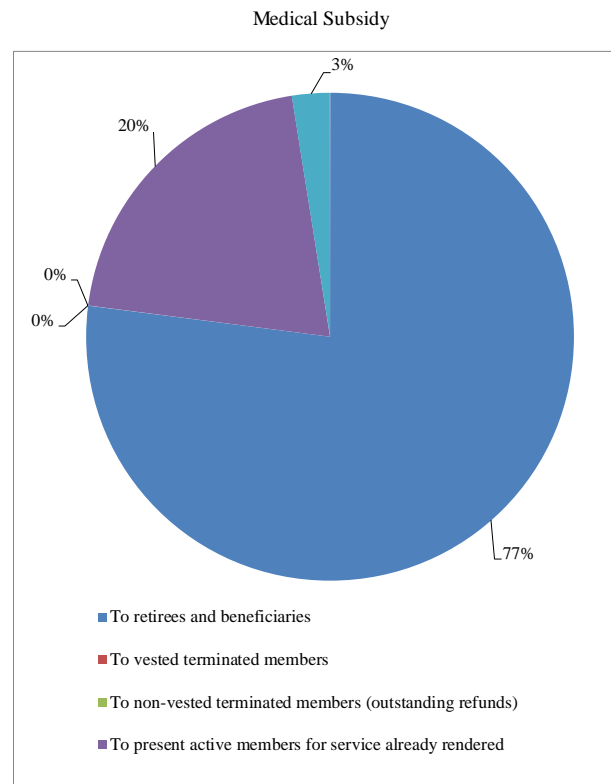
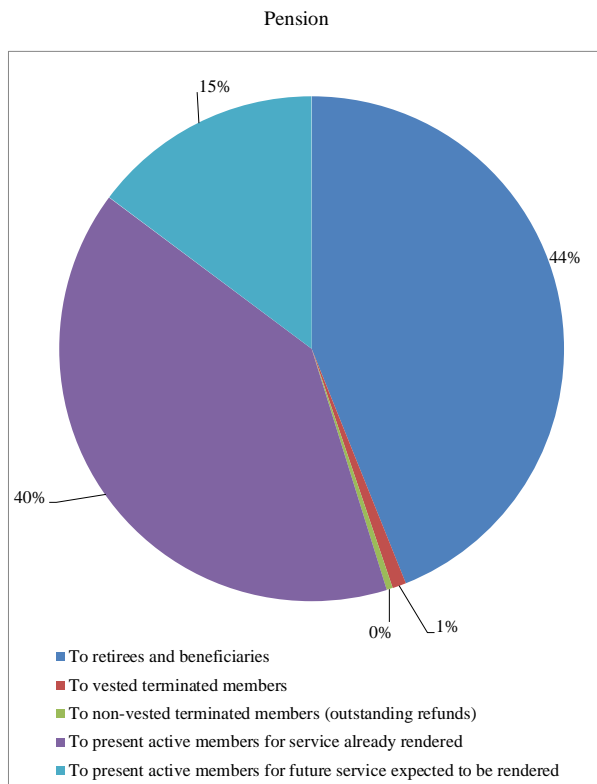
Total NHRS Members

Covered Group	Employees	Teachers	Police	Fire	Total
Current Cost					
Fiscal Year 2016					
Estimated Dollar Amount	\$ 141,877,278	\$ 181,986,355	\$ 78,593,155	\$ 37,706,433	\$ 440,163,221
Fiscal Year 2017					
Estimated Dollar Amount	\$ 147,197,676	\$ 188,810,843	\$ 81,540,398	\$ 39,120,425	\$ 456,669,342

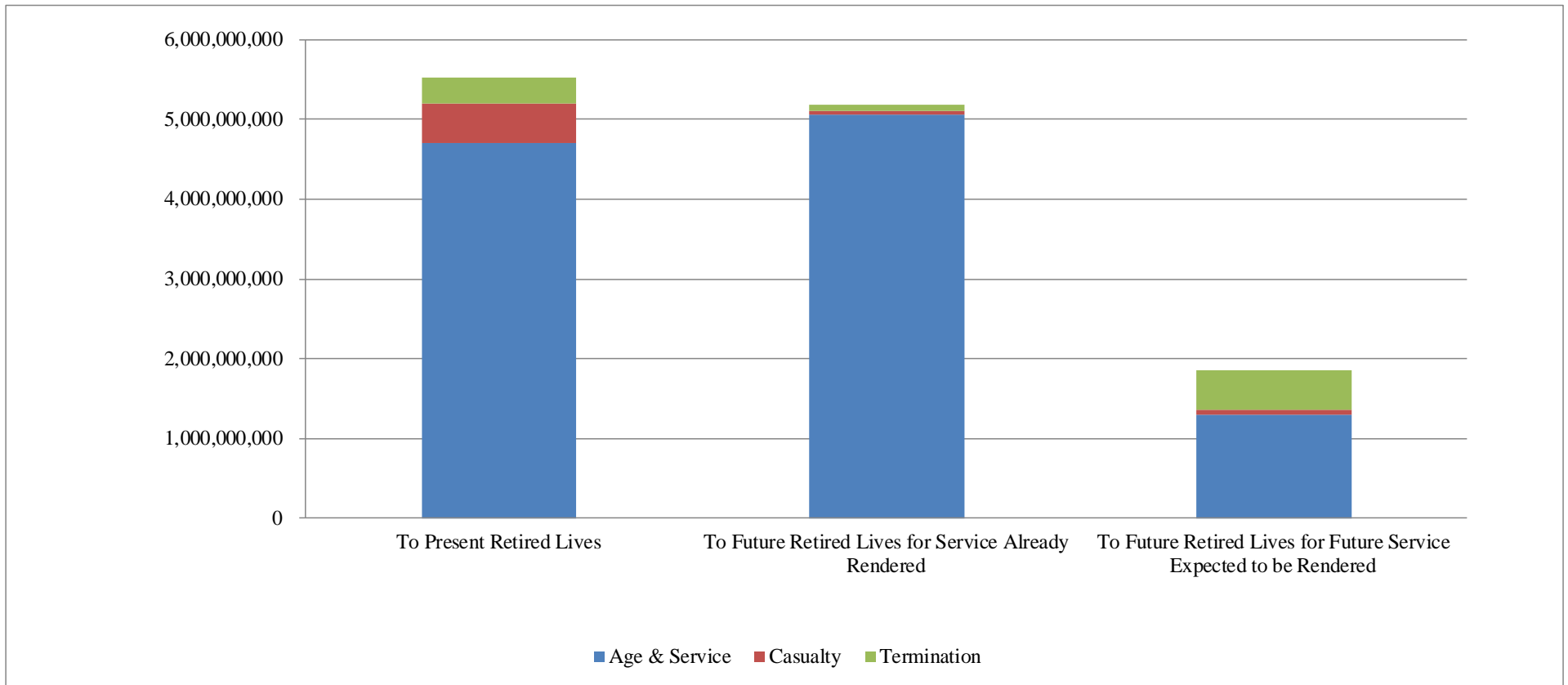
Sources of Funds

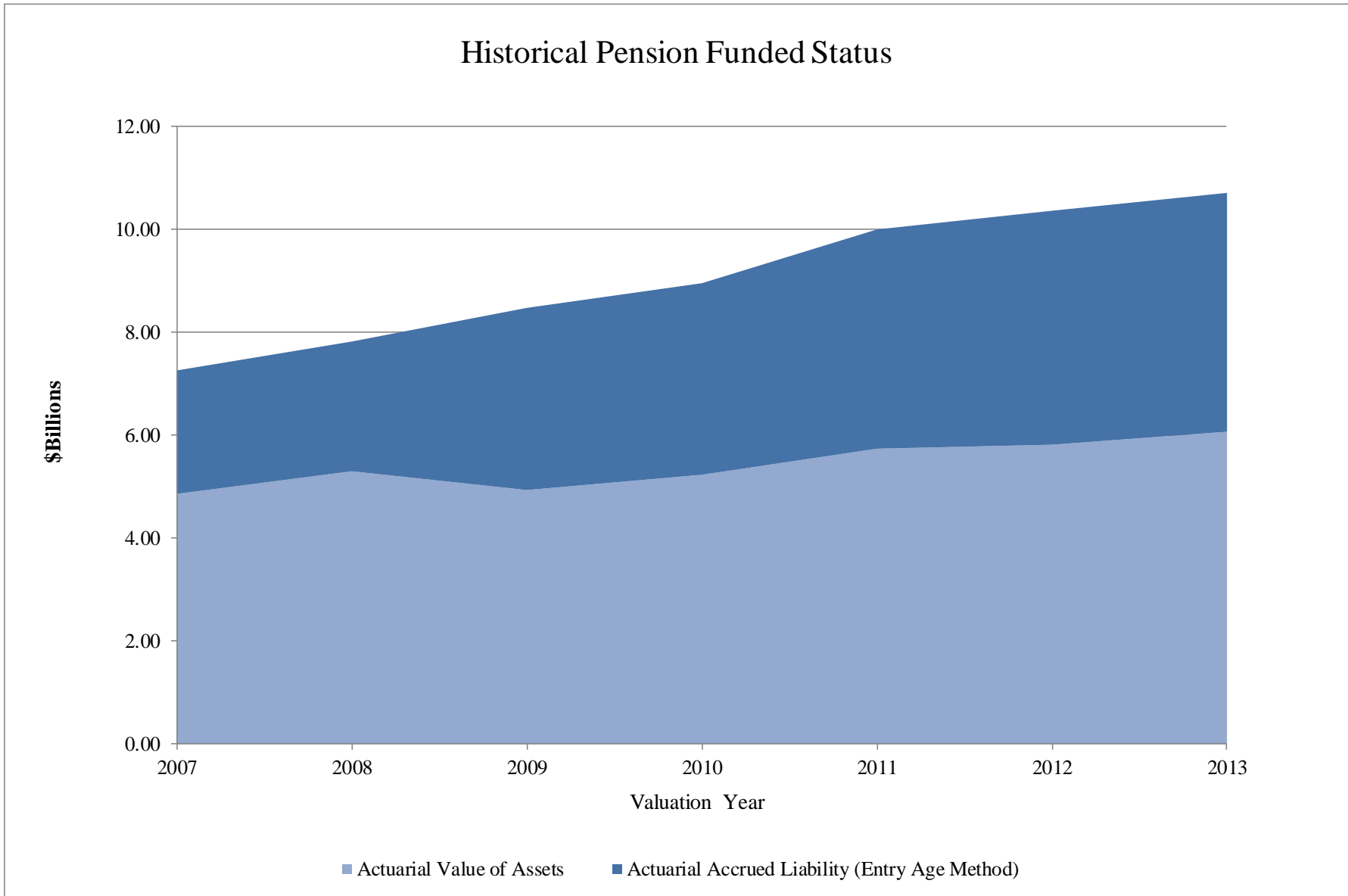


Uses of Funds



Comparison of Pension Liabilities by Type





Results of the Valuation

Actuarial Valuation

This is the actuarial valuation of the New Hampshire Retirement System, prepared as of June 30, 2013.

The primary purposes of this valuation report are to measure the plan's liabilities and to analyze changes in NHRS' actuarial position.

In addition, this report provides information in connection with Governmental Accounting Standards Board Statements 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.

Valuations for certifying contribution rates are prepared biennially, as of June 30 on the odd numbered years (2011, 2013, etc.). The June 30, 2013 actuarial valuation determines the FY 2016 and 2017 contribution rates. All results regarding employer contribution rates shown in this report are preliminary.

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 7.00% of member compensation for Group I Members (Employees and Teachers), 11.55% of member compensation for Police Members and 11.80% of member compensation for Fire Members. 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 closed 30-year amortization of unfunded actuarial accrued liability in the determination of the employer contributions. The amortization period is 24 years for FY 2016 and 23 years for FY 2017.

We have computed the pension contribution rates that will satisfy the statute based on the June 30, 2013 valuation to be:

	Employer Contribution Rates - Pension				NHRS
	Employees	Teachers	Police	Fire	Total
2016-17 Biennium	10.86%	12.72%	22.54%	25.32%	13.55%

In order for the statute to be satisfied, this entire rate must be contributed to the pension fund. The New Hampshire 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. IRS Regulations require the 401(h) contributions to be no more than 25% of total contributions other than contributions to fund past service credits.

There are four separate 401(h) plans: 1) State Employees; 2) Political Subdivision Employees; 3) Teachers and 4) Police/Fire. The table below shows the pension and medical subsidy contribution rates for each subgroup.

	Computed Employer Contribution Rates as a Percent of Payroll				
	State Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.86%		22.54%	25.32%	12.40%
Medical Subsidy	1.64%		3.84%	3.84%	1.93%
Total	12.50%		26.38%	29.16%	14.33%

	Computed Employer Contribution Rates as a Percent of Payroll				
	Political Subdivision Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.86%	12.72%	22.54%	25.32%	13.88%
Medical Subsidy	0.31%	2.95%	3.84%	3.84%	2.29%
Total	11.17%	15.67%	26.38%	29.16%	16.17%

** The grand total contribution rates for NHRS (State and Political Subdivisions combined) are 13.55% of payroll for pension and 2.21% for the medical subsidy for a grand total of 15.76% of payroll. The rates shown above for the total State and total Political Subdivisions vary due to different proportions of payroll in the various member classifications.*

The 401(h) account balance for Teachers is negative as of June 30, 2013. The medical subsidy contribution rates for State Employees and Teachers shown above are the computed amounts needed for pay-as-you-go financing of the retiree medical subsidy with a 20% margin for adverse experience by June 30, 2016. It is imperative that NHRS monitor collections closely to ensure the necessary funds are collected to provide the benefit.

The State Employees' 401(h) account has reached pay-as-you-go status.

The Political Subdivision Employees' 401(h) account is projected to reach pay-as-you-go status in the fiscal year ending June 30, 2028. This is the same as the projection in the prior valuation.

The Police/Fire 401(h) account is projected to reach pay-as-you-go status in the fiscal year ending June 30, 2024. In the prior valuation depletion was projected to occur in the year ending June 30, 2023.

History of Contribution Rates

Pension

Fiscal Year Ending	Employer Contribution Rates				Total
	Employees	Teachers	Police	Fire	
2010	9.09%	9.38%	17.34%	22.52%	10.70%
2011	9.09%	9.38%	17.34%	22.52%	10.70%
July 1, 2011 - July 30, 2011	10.71%	11.51%	22.92%	28.25%	13.11%
Aug 1, 2011 - June 30, 2012	8.48%	8.99%	15.98%	18.92%	9.97%
2013	8.48%	8.99%	15.98%	18.92%	9.97%
2014-2015#	10.44%	11.96%	21.35%	23.79%	12.79%
2016-2017	10.86%	12.72%	22.54%	25.32%	13.55%

Fiscal Year Ending	Employer Dollars (\$Millions)*				Total
	Employees	Teachers	Police	Fire	
2010	\$101.2	\$97.1	\$46.4	\$25.0	\$269.7
2011	\$103.5	\$98.0	\$46.9	\$26.2	\$274.6
2012	\$94.4	\$93.5	\$44.5	\$22.2	\$254.6
2013	\$91.7	\$92.9	\$43.2	\$22.0	\$249.8
2014	\$116.9	\$129.0	\$59.1	\$28.6	\$333.6
2015	\$121.3	\$133.9	\$61.3	\$29.7	\$346.1
2016	\$130.9	\$147.7	\$67.2	\$32.7	\$378.5
2017	\$135.8	\$153.3	\$69.7	\$34.0	\$392.7

Medical Subsidy

Fiscal Year Ending	Employer Contribution Rates				Total
	State	Employees		Police & Fire	
	Employees	Political Sub	Teachers		
2010	3.03%	0.00%	1.32%	2.17%	1.47%
2011	3.03%	0.00%	1.32%	2.17%	1.47%
July 1, 2011 - July 30, 2011	1.60%	0.38%	2.44%	2.65%	1.82%
Aug 1, 2011 - June 30, 2012	1.60%	0.32%	2.31%	3.97%	1.95%
2013	1.60%	0.32%	2.31%	3.97%	1.95%
2014-15	1.62%	0.33%	2.20%	3.95%	1.90%
2016-17	1.64%	0.31%	2.95%	3.84%	2.21%

Fiscal Year Ending	Employer Dollars (\$Millions)*				Total
	State	Employees		Police & Fire	
	Employees	Political Sub	Teachers		
2010	\$10.4	\$0.4	\$13.6	\$8.1	\$32.6
2011	\$10.3	\$0.4	\$13.8	\$8.4	\$32.9
2012	\$8.3	\$1.9	\$24.0	\$14.7	\$48.9
2013	\$8.8	\$1.9	\$23.8	\$15.3	\$49.8
2014	\$8.2	\$2.0	\$23.7	\$15.7	\$49.6
2015	\$8.5	\$2.1	\$24.6	\$16.3	\$51.5
2016	\$8.9	\$2.0	\$34.3	\$16.4	\$61.7
2017	\$9.3	\$2.1	\$35.5	\$17.0	\$64.0

Member Contributions

Fiscal Year Ending	Member Contribution Rates				Total
	Employees	Teachers	Police	Fire	
2010	5.00%	5.00%	9.30%	9.30%	5.64%
2011	5.00%	5.00%	9.30%	9.30%	5.64%
2012	7.00%	7.00%	11.55%	11.80%	7.69%
2013	7.00%	7.00%	11.55%	11.80%	7.69%
2014-15	7.00%	7.00%	11.55%	11.80%	7.69%
2016-17	7.00%	7.00%	11.55%	11.80%	7.71%

Fiscal Year Ending	Member Dollars (\$Millions)*				Total
	Employees	Teachers	Police	Fire	
2010	\$59.6	\$54.2	\$25.4	\$10.2	\$149.5
2011	\$59.3	\$56.2	\$26.2	\$10.7	\$152.4
2012	\$80.5	\$75.0	\$30.7	\$13.4	\$199.6
2013	\$77.8	\$74.1	\$31.0	\$13.7	\$196.5
2014	\$78.4	\$75.5	\$32.0	\$14.2	\$200.0
2015	\$81.3	\$78.4	\$33.2	\$14.7	\$207.6
2016	\$84.4	\$81.3	\$34.4	\$15.3	\$215.3
2017	\$87.5	\$84.3	\$35.7	\$15.8	\$223.4

* Dollar amounts for 2014 and beyond are estimated.

Rates shown are for Political Subdivision. Rates for State are 10.51%, 21.45% and 23.90% for Employees, Police and Fire, respectively.

Special Contribution Requirement

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

Fund	Agency	UAAL as of 6/30/2013	2013/2014 Contribution	UAAL as of 6/30/2014	2014/2015 Contribution	UAAL as of 6/30/2015	2015/2016 Contribution	UAAL as of 6/30/2016	2016/2017 Contribution	UAAL as of 6/30/2017	Fiscal Year of Final Payment
Employees	Town of Raymond	\$ 11,001	\$ 2,362	\$ 9,492	\$ 2,362	\$ 7,866	\$ 2,362	\$ 6,114	\$ 2,362	\$ 4,226	2019
	Brookline Public Library	1,317	1,317	-	-	-	0	0	0	0	2014
	Total	\$ 12,318	\$ 3,679	\$ 9,492	\$ 2,362	\$ 7,866	\$ 2,362	\$ 6,114	\$ 2,362	\$ 4,226	

Contributions are assumed to occur at the end of the fiscal year for the Town of Raymond and the beginning of the fiscal year for Brookline Public Library. Amounts after June 30, 2013 are re-amortized under new assumptions.

Funded Status

As of the valuation date, the Unfunded Actuarial Accrued Liability (UAAL) is \$4,638.1 million (pension only), and the funded ratio (the ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability) is 56.7% (pension only). This valuation was prepared using the Entry-Age Actuarial Cost Method. For comparison, the funded ratio as of June 30, 2012 was 56.1% (pension only).

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 from year-to-year.

The level percent of payroll amortization of the UAAL assumes that the plan will remain open to new hires, that the size of the covered active population will remain constant, and that the covered payroll will grow at 3.75% per year.

Actuarial Value of Assets

The Market Value of Assets of the System is greater than the Actuarial Value of Assets by \$336 million as of the valuation date (see page 40). This difference will be gradually recognized over the next four years in the absence of future gains/losses.

Our estimate of the dollar weighted rate of return on the market value of assets was 14.38% for the year ending June 30, 2013. (Note: This dollar weighted measure may differ from investment manager calculations and should not be used as a measure of investment performance.) The recognized dollar weighted rate of return on the actuarial value of assets was 7.12% for the year ending June 30, 2013.

The Special Account was repealed and transferred into the main pension assets.

The total market value as of June 30, 2013 is \$6.43 billion. The actuarial value of assets as of June 30, 2013 is \$6.09 billion.

Please see Section C for additional asset information.

Summary of Changes from June 30, 2012 to June 30, 2013

	Pension				
	Employees	Teachers	Police	Fire	Total
Reconciliation of UAAL					
Expected	\$ 1,624.6	\$ 1,945.8	\$ 775.1	\$ 360.9	\$4,706.3
Impact of (Gain)Loss	(47.1)	(27.7)	4.7	1.9	(68.3)
Impact of Assumption Change	0.0	0.0	0.0	0.0	N/A
Impact of Plan Change	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>N/A</u>
Total	\$1,577.5	\$1,918.0	\$779.8	\$362.8	\$4,638.1
Funded %					
Prior Valuation	54.4 %	53.7 %	61.4 %	62.4 %	56.1 %
Impact of Gain(Loss)	1.2%	0.3%	(0.1)%	0.0%	0.6%
Impact of Assumption Change	0.0%	0.0%	0.0%	0.0%	0.0%
Impact of Plan Change	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total	55.6 %	54.0 %	61.3 %	62.4 %	56.7 %
Reconciliation of Employer Contribution Rate					
State Employees					
Prior Valuation	11.18 %		22.81 %	25.83 %	12.72 %
Impact of (Gain)Loss	(0.32)%		(0.27)%	(0.51)%	(0.32)%
Impact of Assumption Change	0.0%		0.0%	0.0%	0.0%
Impact of Plan Change	<u>0.0%</u>		<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total	10.86 %		22.54 %	25.32 %	12.40 %
Political Subdivision Employees					
Prior Valuation	11.18 %	12.76 %	22.81 %	25.83 %	14.06 %
Impact of (Gain)Loss	(0.32)%	(0.04)%	(0.27)%	(0.51)%	(0.18)%
Impact of Assumption Change	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Impact of Plan Change	<u>0.00 %</u>	<u>0.00 %</u>	<u>0.00 %</u>	<u>0.00 %</u>	<u>0.00 %</u>
Total	10.86 %	12.72 %	22.54 %	25.32 %	13.88 %

	Medical Subsidy				
	State Employees	Political Subdivision Employees	Teachers	Police & Fire	Total
Reconciliation of UAAL					
Expected	\$ 87.1	\$ 49.5	\$ 259.7	\$ 339.8	\$736.1
Impact of (Gain)Loss	(5.6)	(5.2)	(3.9)	(11.4)	(26.1)
Impact of Assumption Change	0.0	0.0	0.0	0.0	0.0
Impact of Plan Change	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total	\$81.5	\$44.3	\$255.8	\$328.4	\$710.0
Reconciliation of Employer Contribution Rate					
Prior Valuation	1.63 %	0.36 %	1.96 %	3.88 %	1.81 %
Impact of (Gain)Loss	(0.14)%	(0.05)%	0.33 %	(0.04)%	0.09 %
Impact of Assumption Change	0.15 %	0.00 %	0.66 %	0.00 %	0.31 %
Impact of Plan Change	<u>0.00 %</u>	<u>0.00 %</u>	<u>0.00 %</u>	<u>0.00 %</u>	<u>0.00 %</u>
Total	1.64 %	0.31 %	2.95 %	3.84 %	2.21 %

Discussion and Comments

Comment 1:

In total, plan experience between June 30, 2012 and June 30, 2013 was favorable for pension and unfavorable for medical subsidy. The dollar weighted rate of return for the year ending June 30, 2013 was 14.38% on the market value of assets and 7.12% for the actuarial value of assets, resulting in a recognized asset loss of \$36 million (pension and medical subsidy combined). Total covered payroll increased by 0.56% versus the assumed increase of 3.75% resulting in pension liability gains. Between the 2012 and 2013 valuation, the pension funded ratio increased by 0.6% (56.1% to 56.7%). The 2016-2017 employer contribution rates determined by this valuation are 0.22% of payroll higher than the estimates from the June 30, 2012 valuation for NHRS in total (a decrease of 0.18% for pension and an increase of 0.40% for medical subsidy).

It is important to note that even though the final 2016-2017 employer contribution rates increased by 0.22% of payroll for NHRS in total from the estimates in the 2012 valuation, the final 2016-2017 rates increased by 1.07% of payroll for NHRS in total from the 2014-2015 certified rates as determined by the 2011 valuation. This is due to the fact that over the two year period between the rate setting valuations (2011 to 2013), the experience was unfavorable. A history of contribution rates is shown on page 11.

The expectation if all assumptions are met is that future pension contribution rates will decline as new hires with lower normal cost replace those hired before July 1, 2011 with higher normal cost. The contribution for the unfunded actuarial accrued liability is designed to be a level percent of payroll with 24 years remaining in the 2016 fiscal year. There are currently unrecognized asset gains (primarily from this year's strong market performance) which will put additional downward pressure on the rates to the extent that future market experience meets expectations. For additional information, see the projections beginning on page 18.

Comment 2:

June 30, 2013 Medical Subsidy Contribution Rates

Determining contribution rates for Medical Subsidy benefits continues to provide challenges. As required by the statutes, the objective is to contribute the minimum amount necessary to maintain assets sufficient to pay medical subsidy benefits in each of the four plans. Given the absence of assets from prior pre-funding (as exists for pension benefits), medical subsidy benefits payable in the future will be largely funded by future employer contributions. However, employer contributions toward medical subsidy benefits are subject to certain limitations as defined in IRC Section 401(h).

In addition, year to year deviations between actual contributions and benefits and projected contributions and benefits are more problematic with regard to medical subsidy funding than pension funding due to the lack of significant assets for medical subsidy benefits and the lag between the setting of the rates and the collection of contributions.

At the November 12, 2013 Board meeting, the Board was presented with three potential approaches to improving the rate setting for the medical subsidy:

- A. Accelerating the 20% margin requirement from the end of the rate setting biennium (June 30, 2017) to one year earlier (June 30, 2016),
- B. Assuming an increase in the expected benefit payments above the current methodology, and
- C. Lowering the assumed increase in expected payroll and hence require higher employer contributions.

At that Board meeting, the Board elected to accelerate the margin requirement (Approach A). The following shows the impact of that change on the medical subsidy rates:

	Employer Contribution Rates - Medical Subsidy				
	Political			Police and Fire	NHRS Total
	State Employees	Subdivision Employees	Teachers		
Base Rates	1.49%	0.31%	2.29%	3.84%	1.90%
Alternative Approach	1.64%	0.31%	2.95%	3.84%	2.21%
Change	0.15%	0.00%	0.66%	0.00%	0.31%

For purposes of determining the contribution rates for the 2016-17 biennium as shown on page 1, we have assumed that benefits for all members receiving a benefit on the valuation date get paid, that the Teacher's subaccount gets replenished, that each subaccount achieves at least a 20% margin by June 30, 2016, and all actuarial assumptions are met.

Comment 3:

The pension normal cost for members hired on and after July 1, 2011 is lower than for other active members. Based on the June 30, 2013 valuation, the computed normal cost rates for those hired on and after July 1, 2011 are shown in the table below.

Normal Cost	Employees	Teachers	Police	Fire	Total
Total	8.29 %	7.15 %	12.53 %	13.07 %	8.62 %
Member	7.00 %	7.00 %	11.55 %	11.80 %	7.71 %
Employer	1.29 %	0.15 %	0.98 %	1.27 %	0.91 %

The total normal cost for the active populations of the four member classifications is expected to decrease each year towards the rates for new hires. Note that the group of those hired on and after July 1, 2011 is still small. There may be fluctuations in the normal cost rate for these members over the next few years which should level out over time as the group grows.

Comment 4:

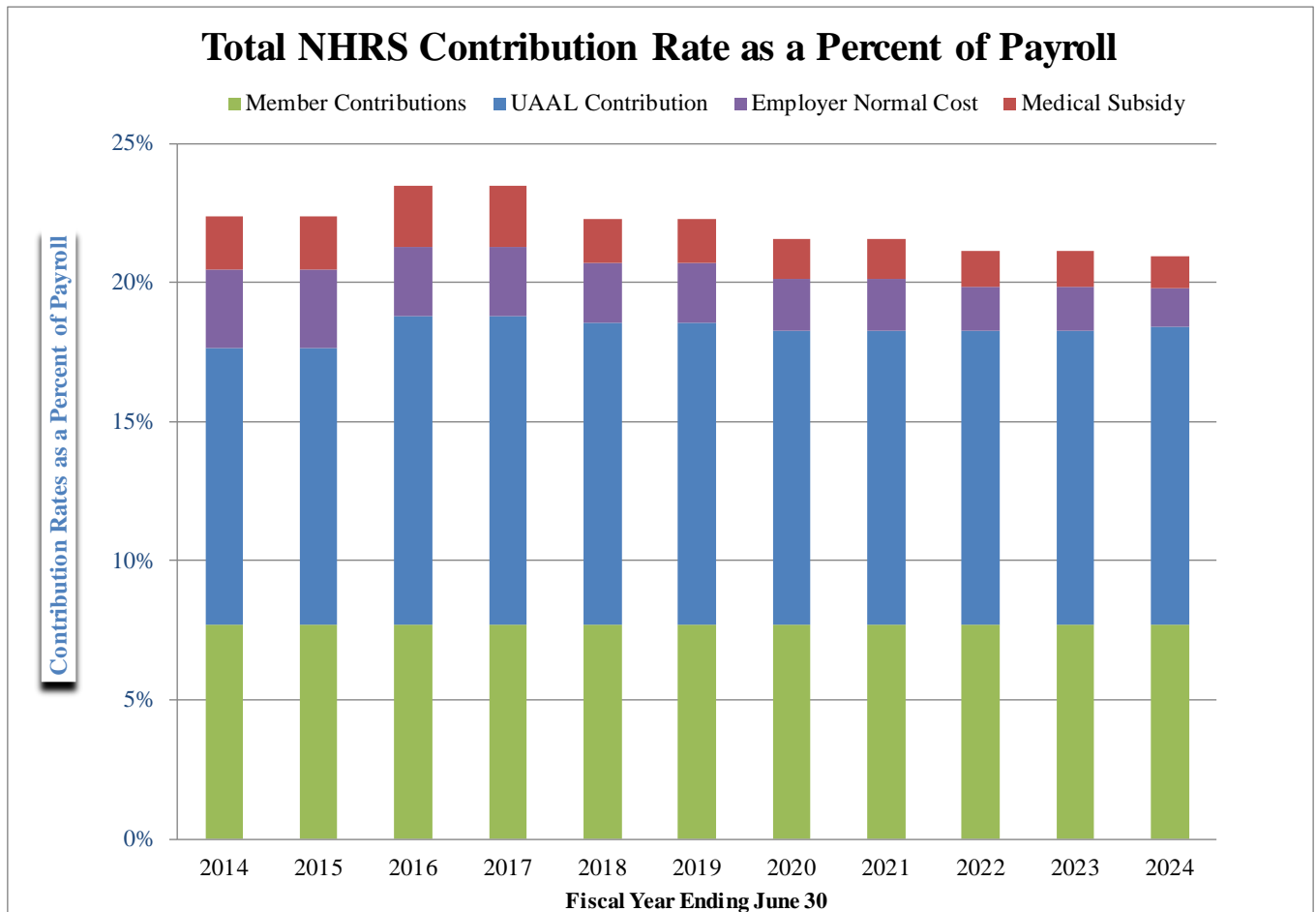
In June 2012, the Governmental Accounting Standards Board (GASB) issued new pension accounting Standards No. 67 and No. 68 for retirement systems and sponsoring governmental entities respectively. The effective date is the first fiscal year following June 15, 2013 for plan disclosures and the first fiscal year following June 15, 2014 for Employer disclosures. Since the release of these standards GRS and NHRS staff have been assessing the implications of these rules and preparing a plan for implementation.

The next steps in this process, scheduled for January 2014, are as follows:

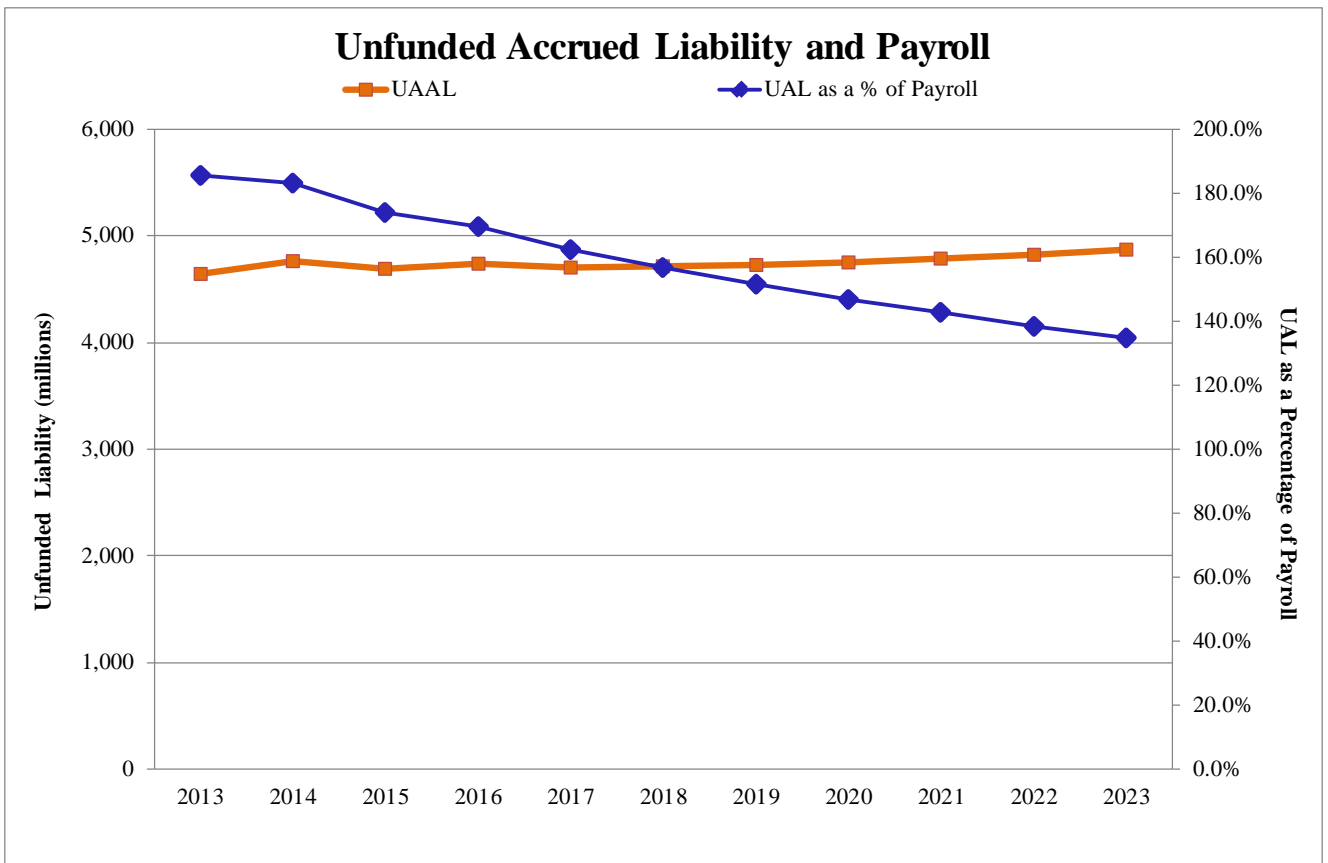
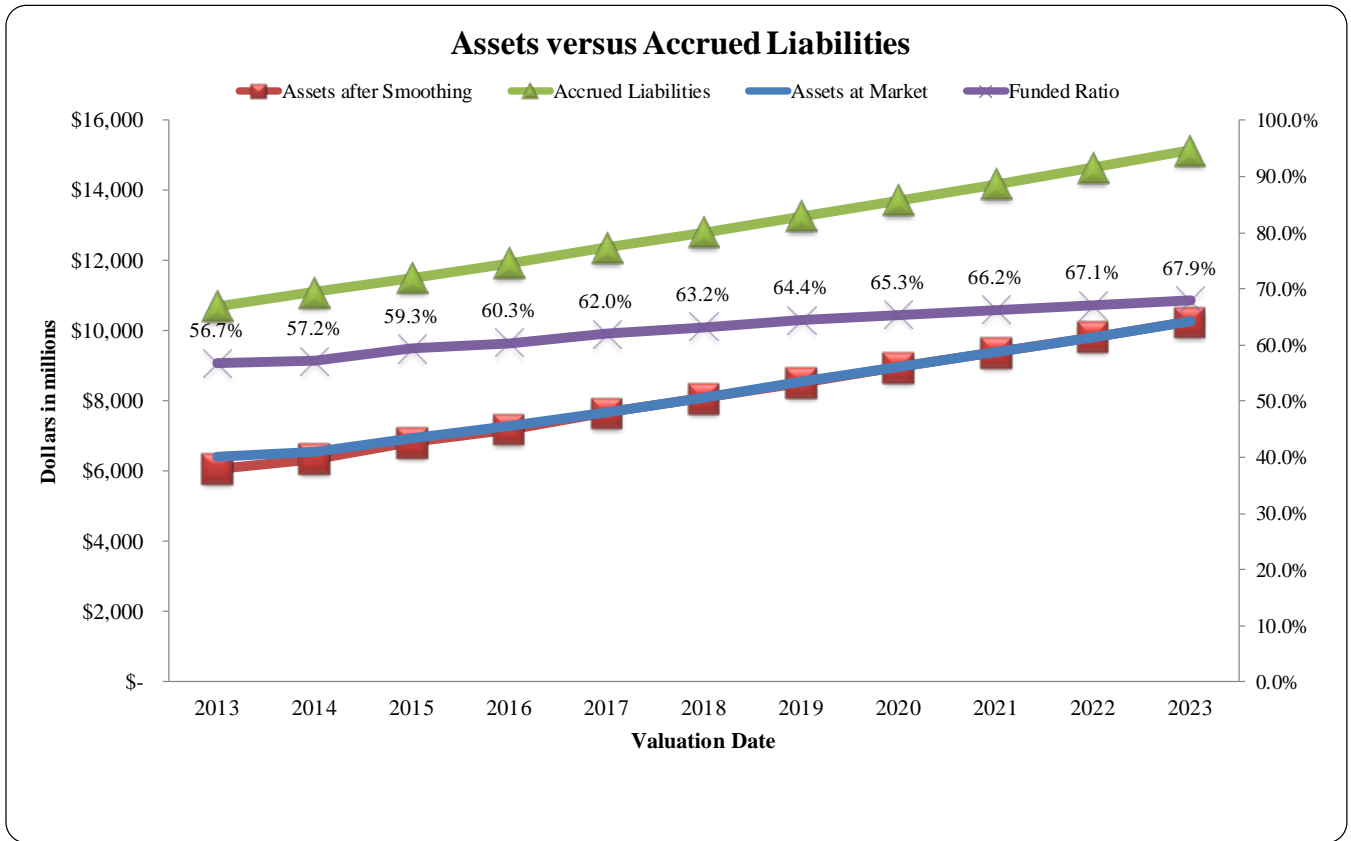
- Finalize the details of implementation plan
- Begin the calculation of results that will be needed for implementation of GASB No. 67 for the fiscal year ending June 30, 2014. This includes the determination of the GASB discount rate to be used for liability calculations
- Develop a formal funding policy given the separation of funding from accounting rules in the new standards.

Projections

Projection results are useful in demonstrating changing relationships among key elements affecting system financial activity. For example, it demonstrates how benefits and system assets will grow in future decades. Projections are not predictions of specific future events and do not provide numeric precision in absolute terms. For instance, cash flow projected to occur 10 years in the future will not be exact (except by coincidence), but understanding the changing relationships between future benefit payout and future investment return can be very useful. It is important to understand that actual experience will differ from the projections.



Projected Contribution Rates - NHRS Total											
Fiscal Year Ending June 30	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Medical Subsidy	1.90%	1.90%	2.21%	2.21%	1.60%	1.60%	1.44%	1.44%	1.28%	1.28%	1.16%
Employer Normal Cost	2.86%	2.86%	2.47%	2.47%	2.14%	2.14%	1.85%	1.85%	1.59%	1.59%	1.35%
UAAL Contribution	9.93%	9.93%	11.08%	11.08%	10.83%	10.83%	10.57%	10.57%	10.55%	10.55%	10.72%
Employer Subtotal	14.69%	14.69%	15.76%	15.76%	14.57%	14.57%	13.86%	13.86%	13.42%	13.42%	13.23%
Member Contributions	7.69%	7.69%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%
Grand Total	22.38%	22.38%	23.47%	23.47%	22.28%	22.28%	21.57%	21.57%	21.13%	21.13%	20.94%



The actuarial projections of retirement and medical subsidy benefits are based on the regular valuation assumptions of NHRS including an open active group with constant population. The projections lead to some general observations:

1. Employer contribution rates are projected to be stable and gradually decline throughout the projection period. The expected gradual decline is due to the lower normal cost for post-July 1, 2011 hires and declining medical subsidy contributions as a percent of payroll. These declines offset projected increases from the asset smoothing method caused by past losses being phased into the actuarial value of assets.
2. The funded ratio is projected to increase steadily to 68% by the end of the projection period. The statutory 30-year amortization period is projected to bring the plan to 100% funded by June 30, 2039.
3. The projection of the funded ratio above reflects certain factors not reflected in the funded ratio projections provided in Section B. For example, the projection above reflects the phase-in of unrecognized investment gains as of June 30, 2011.
4. The projection is highly sensitive to the actual and expected profile of new hires. This is the second valuation with members hired on and after July 1, 2011. As the group of those hired on or after July 1, 2011 grows, the projection results may fluctuate year to year until the population stabilizes.

SECTION B
FUNDING RESULTS

Development of Employer Contribution Rates State Employees

Division:	Employees	Teachers	Police	Fire	Total
Normal Cost					
Age and Service Retirement	6.17%		10.15%	14.80%	6.72%
Termination	2.18%		5.04%	2.16%	2.53%
Death-in-Service	0.19%		0.18%	0.14%	0.19%
Disability	0.25%		0.89%	0.91%	0.33%
Expenses	<u>0.35%</u>		<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>
Total	9.14%		16.61%	18.36%	10.12%
UAAL Payment*	<u>8.72%</u>		<u>17.48%</u>	<u>18.76%</u>	<u>9.87%</u>
Total Pension Contribution	17.86%		34.09%	37.12%	19.99%
Fiscal Year 2016					
Member Contributions	7.00%		11.55%	11.80%	7.60%
Employer Pension Contribution	10.86%		22.54%	25.32%	12.40%
Employer Health Subsidy Contribution	<u>1.64%</u>		<u>3.84%</u>	<u>3.84%</u>	<u>1.93%</u>
Total Employer Contribution	12.50%	N/A	26.38%	29.16%	14.33%
Estimated Dollar Contribution	\$ 68,126,052	N/A	\$ 20,470,332	\$ 1,214,752	\$ 89,811,137
Fiscal Year 2017					
Member Contributions	7.00%		11.55%	11.80%	7.60%
Employer Pension Contribution	10.86%		22.54%	25.32%	12.40%
Employer Health Subsidy Contribution	<u>1.64%</u>		<u>3.84%</u>	<u>3.84%</u>	<u>1.93%</u>
Total Employer Contribution	12.50%	N/A	26.38%	29.16%	14.33%
Estimated Dollar Contribution	\$ 70,680,779	N/A	\$ 21,237,969	\$ 1,260,306	\$ 93,179,054
Contribution Rates from Prior Valuation					
FY 2014#	12.13%		25.40%	27.85%	14.73%
FY 2015#	12.13%		25.40%	27.85%	14.73%

* Unfunded Actuarial Accrued Liability, financed over a 24 year period from the contribution effective date -- 7/1/2015.

Computed in June 30, 2011 Actuarial Valuation.

Development of Employer Contribution Rates Political Subdivision Members

Division:	Employees	Teachers	Police	Fire	Total
Normal Cost					
Age and Service Retirement	6.17%	6.19%	10.15%	14.80%	7.08%
Termination	2.18%	2.04%	5.04%	2.16%	2.39%
Death-in-Service	0.19%	0.09%	0.18%	0.14%	0.13%
Disability	0.25%	0.02%	0.89%	0.91%	0.23%
Expenses	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>
Total	9.14%	8.69%	16.61%	18.36%	10.19%
UAAL Payment*	<u>8.72%</u>	<u>11.03%</u>	<u>17.48%</u>	<u>18.76%</u>	<u>11.43%</u>
Total Pension Contribution	17.86%	19.72%	34.09%	37.12%	21.62%
Fiscal Year 2016					
Member Contributions	7.00%	7.00%	11.55%	11.80%	7.74%
Employer Pension Contribution	10.86%	12.72%	22.54%	25.32%	13.88%
Employer Health Subsidy Contribution	<u>0.31%</u>	<u>2.95%</u>	<u>3.84%</u>	<u>3.84%</u>	<u>2.29%</u>
Total Employer Contribution	11.17%	15.67%	26.38%	29.16%	16.17%
Estimated Dollar Contribution	\$ 73,751,226	\$ 181,986,355	\$ 58,122,823	\$ 36,491,681	\$ 350,352,085
Fiscal Year 2017					
Member Contributions	7.00%	7.00%	11.55%	11.80%	7.60%
Employer Pension Contribution	10.86%	12.72%	22.54%	25.32%	14.02%
Employer Health Subsidy Contribution	<u>0.31%</u>	<u>2.95%</u>	<u>3.84%</u>	<u>3.84%</u>	<u>2.29%</u>
Total Employer Contribution	11.17%	15.67%	26.38%	29.16%	16.31%
Estimated Dollar Contribution	\$ 76,516,897	\$ 188,810,843	\$ 60,302,429	\$ 37,860,119	\$ 363,490,288
Contribution Rates from Prior Valuation					
FY 2014#	10.77%	14.16%	25.30%	27.74%	14.68%
FY 2015#	10.77%	14.16%	25.30%	27.74%	14.68%

* *Unfunded Actuarial Accrued Liability, financed over a 24 year period from the contribution effective date -- 7/1/2015.*

Computed in June 30, 2011 Actuarial Valuation.

Development of Pension Actuarial Liabilities

June 30, 2013

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	\$ 6,359,984,398	\$ 1,294,874,333	\$ 5,065,110,065
Disability benefits likely to be paid to present active members	54,949,314	46,595,693	8,353,621
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	56,920,661	25,086,489	31,834,172
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	415,454,879	491,613,006	(76,158,127)
Benefits likely to be paid to current inactive and vested deferred members	159,814,843	-	159,814,843
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	5,519,813,863	-	5,519,813,863
Total	\$ 12,566,937,958	\$ 1,858,169,521	\$ 10,708,768,437
Actuarial Value of Assets	\$ 6,070,681,258	-	\$ 6,070,681,258
Liabilities to be Covered by Future Contributions	\$ 6,496,256,700	\$ 1,858,169,521	\$ 4,638,087,179
Funded Ratio			56.7%

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

Level Percent Amortization

Fiscal Year Ending Year	June 30,	Employer	UAAL				Funded Ratio
		Contribution Rates UAAL Payment	Projected Payroll	Beginning of Year	UAAL Payment	UAAL End of Year	
	2014	10.31%	\$ 2,596	\$ 4,638	\$ 268	\$ 4,720	56.7%
	2015	10.31%	2,693	4,720	278	4,797	56.7%
1	2016	11.08%	2,794	4,797	310	4,848	57.7%
2	2017	11.08%	2,899	4,848	321	4,890	58.9%
3	2018	11.08%	3,007	4,890	333	4,923	60.0%
4	2019	11.08%	3,120	4,923	346	4,945	61.2%
5	2020	11.08%	3,237	4,945	359	4,956	62.3%
6	2021	11.08%	3,359	4,956	372	4,954	63.6%
7	2022	11.08%	3,484	4,954	386	4,937	64.8%
8	2023	11.08%	3,615	4,937	401	4,904	66.1%
9	2024	11.08%	3,751	4,904	416	4,852	67.5%
10	2025	11.08%	3,891	4,852	431	4,781	68.9%
11	2026	11.08%	4,037	4,781	447	4,687	70.4%
12	2027	11.08%	4,189	4,687	464	4,568	72.0%
13	2028	11.08%	4,346	4,568	482	4,422	73.7%
14	2029	11.08%	4,509	4,422	500	4,246	75.4%
15	2030	11.08%	4,678	4,246	518	4,037	77.4%
16	2031	11.08%	4,853	4,037	538	3,792	79.4%
17	2032	11.08%	5,035	3,792	558	3,507	81.5%
18	2033	11.08%	5,224	3,507	579	3,177	83.8%
19	2034	11.08%	5,420	3,177	601	2,800	86.2%
20	2035	11.08%	5,623	2,800	623	2,370	88.7%
21	2036	11.08%	5,834	2,370	646	1,883	91.4%
22	2037	11.08%	6,053	1,883	671	1,332	94.1%
23	2038	11.08%	6,280	1,332	696	713	97.0%
24	2039	11.08%	6,515	713	722	0	100.0%

The funded ratio is projected in this amortization schedule assuming all actuarial assumptions are exactly met. Actual experience will differ.

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

**Level Dollar Amortization
(Not the Statutory Method)**

(Hypothetical Illustration)

		UAAL			
Year	Fiscal Year Ending June 30,	Beginning of Year	UAAL Payment	UAAL End of Year	Funded Ratio
	2014	\$ 4,638	\$ 268	\$ 4,720	56.7%
	2015	4,720	278	4,797	56.7%
1	2016	4,797	430	4,723	58.4%
2	2017	4,723	430	4,643	60.5%
3	2018	4,643	430	4,557	62.7%
4	2019	4,557	430	4,464	64.8%
5	2020	4,464	430	4,364	66.8%
6	2021	4,364	430	4,256	68.9%
7	2022	4,256	430	4,140	70.9%
8	2023	4,140	430	4,014	72.9%
9	2024	4,014	430	3,879	74.8%
10	2025	3,879	430	3,734	76.8%
11	2026	3,734	430	3,577	78.7%
12	2027	3,577	430	3,409	80.6%
13	2028	3,409	430	3,227	82.4%
14	2029	3,227	430	3,031	84.3%
15	2030	3,031	430	2,820	86.1%
16	2031	2,820	430	2,592	87.8%
17	2032	2,592	430	2,347	89.6%
18	2033	2,347	430	2,083	91.2%
19	2034	2,083	430	1,798	92.9%
20	2035	1,798	430	1,491	94.4%
21	2036	1,491	430	1,161	95.9%
22	2037	1,161	430	805	97.3%
23	2038	805	430	421	98.7%
24	2039	421	430	0	100.0%

The funded ratio is projected in this amortization schedule assuming all actuarial assumptions are exactly met. Actual experience will differ.

Actuarial Balance Sheet as of June 30, 2013

Assets and Present Value of Expected Future Contributions

	Pension	Medical Subsidy
A. Present valuation assets		
1. Net assets from system financial statements	\$ 6,404,983,966	\$ 23,025,061
2. Reserve for TSAs	-	-
3. Funding value adjustment	(334,302,708)	(1,201,774)
4. Valuation assets	6,070,681,258	21,823,287
B. Actuarial present value of expected future employer contributions		
1. For normal costs	317,862,761	18,872,424
2. For unfunded actuarial accrued liability	4,638,087,179	710,048,825
3. Total	4,955,949,940	728,921,249
C. Actuarial present value of expected future member contributions	1,540,306,760	-
D. Total Present and Expected Future Resources	\$12,566,937,958	\$ 750,744,536

Present Value of Expected Future Benefit Payments

	Pension	Medical Subsidy
A. To retirees and beneficiaries	\$ 5,519,813,863	\$ 578,368,076
B. To vested terminated members	109,883,723	-
C. To non-vested terminated members (outstanding refunds)	49,931,120	-
D. To present active members		
1. Allocated to service rendered prior to valuation date - actuarial accrued liability	5,029,139,731	153,504,036
2. Allocated to service likely to be rendered after valuation date	1,858,169,521	18,872,424
3. Total	6,887,309,252	172,376,460
E. Total Actuarial Present Value of Expected Future Pension Payments	\$12,566,937,958	\$ 750,744,536

Experience Gain/(Loss) -- June 30, 2013

	Pension	Medical Subsidy
(1) UAAL* at start of biennium	\$ 4,257,734,925	\$ 744,352,867
(2) Normal cost from last valuation for year 1	276,114,128	3,203,080
(3) Actual contributions (employer and employee) for year 1	454,149,706	48,963,885
(4) Interest accrual: $[(1)+1/2 [(2)-(3)]] \times .0775$	323,075,578	55,914,116
(5) Expected UAAL end of year 1: $(1)+(2)-(3)+(4)$	4,402,774,925	754,506,178
(6) Change from legislation	-	-
(7) Change from revised actuarial assumptions	-	-
(8) Other	-	-
(9) Expected UAAL after changes: $(5)+(6)+(7)+(8)$	4,402,774,925	754,506,178
(10) Actual UAAL at end of year	4,543,718,863	728,442,016
(11) Gain/(loss) for year 1: $(9)-(10)$	(140,943,938)	26,064,162
(12) Gain/(loss) as percent of actuarial accrued liabilities at start of year	(1.4)%	3.4 %
(13) Normal cost from last valuation for year 2	263,885,603	2,769,977
(14) Actual contributions (employer and employee) for year 2	446,324,217	49,711,946
(15) Interest accrual: $[(10)+1/2 [(13)-(14)]] \times .0775$	345,068,716	54,635,255
(16) Expected UAAL end of year 2: $(10)+(13)-(14)+(15)$	4,706,348,965	736,135,301
(17) Change from legislation	-	-
(18) Change from revised actuarial assumptions	-	-
(19) Expected UAAL after changes: $(16)+(17)+(18)$	4,706,348,965	736,135,301
(20) Actual UAAL at end of year	4,638,087,179	710,048,825
(21) Gain/(loss) for year 2: $(19)-(20)$	68,261,786	26,086,476
(22) Gain/(loss) as percent of actuarial accrued liabilities at start of year	0.7 %	3.5 %

* *Unfunded Actuarial 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 and inactive 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)								
Projected Pension Liabilities For						Percentage of Accrued		
Fiscal Year	(1)	(2)	(3)	Net Assets	Liabilities Covered By Net			
	Aggregate Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members (Employer Financed Portion)	Available For Benefits	Assets Available			
	(1)	(2)	(3)		(1)	(2)	(3)	
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%	
2009 *	2,393,635	4,012,274	2,069,143	4,937,320	100%	63%	0%	
2010	2,553,612	4,378,205	2,022,115	5,233,838	100%	61%	0%	
2011 #*	2,631,430	4,959,865	2,406,956	5,740,516	100%	63%	0%	
2012	2,773,081	5,246,672	2,341,847	5,817,882	100%	58%	0%	
2013	2,808,526	5,519,814	2,380,428	6,070,681	100%	59%	0%	

After reflection of changes in assumptions.

* After reflection of changes in 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)	(2)	(3)	(1)		(2)	(3)	
		Aggregate Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members (Employer Financed Portion)					
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%	
Employees	2009 *	899,364	1,217,430	666,232	1,600,150	100%	58%	0%	
Teachers	2009 *	926,049	1,608,341	855,367	1,957,103	100%	64%	0%	
Police	2009 *	381,273	790,433	378,409	940,825	100%	71%	0%	
Fire	2009 *	186,949	396,070	169,135	439,241	100%	64%	0%	
Employees	2010	955,735	1,344,902	680,958	1,721,002	100%	57%	0%	
Teachers	2010	998,775	1,770,635	783,710	2,049,650	100%	59%	0%	
Police	2010	397,440	851,136	386,621	997,325	100%	70%	0%	
Fire	2010	201,661	411,532	170,827	465,861	100%	64%	0%	
Employees	2011 **	995,389	1,548,109	810,983	1,834,609	100%	54%	0%	
Teachers	2011 **	1,041,699	1,893,862	973,407	2,153,182	100%	59%	0%	
Police	2011 **	396,344	1,030,900	432,256	1,179,798	100%	76%	0%	
Fire	2011 **	197,998	486,994	190,310	572,927	100%	77%	0%	
Employees	2012	1,052,106	1,641,026	756,255	1,877,395	100%	50%	0%	
Teachers	2012	1,101,262	1,999,152	949,670	2,173,315	100%	54%	0%	
Police	2012	411,672	1,092,005	432,116	1,189,308	100%	71%	0%	
Fire	2012	208,041	514,489	203,805	577,864	100%	72%	0%	
Employees	2013	1,069,628	1,729,855	755,482	1,977,479	100%	52%	0%	
Teachers	2013	1,107,192	2,087,926	977,937	2,255,011	100%	55%	0%	
Police	2013	417,630	1,160,173	438,580	1,236,579	100%	71%	0%	
Fire	2013	214,076	541,860	208,430	601,612	100%	72%	0%	

After reflection of changes in assumptions.

* After reflection of changes in legislation.

Development of Pension Actuarial Liabilities June 30, 2013

Employees Pension

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	\$ 2,303,600,493	\$ 480,160,816	\$ 1,823,439,677
Disability benefits likely to be paid to present active members	12,137,202	18,231,977	(6,094,775)
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	31,226,829	14,070,089	17,156,740
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	114,131,884	192,654,917	(78,523,033)
Benefits likely to be paid to current inactive and vested deferred members	69,131,194	-	69,131,194
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	1,729,854,975	-	1,729,854,975
Total	\$ 4,260,082,577	\$ 705,117,799	\$ 3,554,964,778
Actuarial Value of Assets	\$ 1,977,479,160	-	\$ 1,977,479,160
Liabilities to be Covered by Future Contributions	\$ 2,282,603,417	\$ 705,117,799	\$ 1,577,485,618
Funded Ratio			55.6%

Employees Pension
Unfunded Actuarial Accrued Liability Payoff Projection
(\$Millions)

Year	Fiscal Year Ending June 30,	Employer	Projected	UAAL Beginning	UAAL	UAAL End	Funded
		Contribution Rates UAAL Payment					
	2014	8.30%	\$ 1,120	\$ 1,577	\$ 93	\$ 1,603	55.6%
	2015	8.30%	1,162	1,603	96	1,628	55.9%
1	2016	8.72%	1,206	1,628	105	1,645	57.2%
2	2017	8.72%	1,251	1,645	109	1,659	58.5%
3	2018	8.72%	1,298	1,659	113	1,670	59.9%
4	2019	8.72%	1,347	1,670	117	1,678	61.3%
5	2020	8.72%	1,398	1,678	122	1,681	62.7%
6	2021	8.72%	1,450	1,681	126	1,680	64.1%
7	2022	8.72%	1,504	1,680	131	1,674	65.5%
8	2023	8.72%	1,560	1,674	136	1,663	67.0%
9	2024	8.72%	1,619	1,663	141	1,645	68.5%
10	2025	8.72%	1,680	1,645	146	1,621	70.0%
11	2026	8.72%	1,743	1,621	152	1,589	71.6%
12	2027	8.72%	1,808	1,589	158	1,548	73.3%
13	2028	8.72%	1,876	1,548	164	1,498	75.0%
14	2029	8.72%	1,946	1,498	170	1,438	76.8%
15	2030	8.72%	2,019	1,438	176	1,367	78.7%
16	2031	8.72%	2,095	1,367	183	1,283	80.7%
17	2032	8.72%	2,174	1,283	190	1,185	82.8%
18	2033	8.72%	2,256	1,185	197	1,072	85.0%
19	2034	8.72%	2,341	1,072	204	943	87.3%
20	2035	8.72%	2,429	943	212	796	89.7%
21	2036	8.72%	2,520	796	220	629	92.2%
22	2037	8.72%	2,615	629	228	441	94.8%
23	2038	8.72%	2,713	441	237	229	97.4%
24	2039	8.72%	2,815	229	245	-	100.0%

The funded ratio is projected in this amortization schedule assuming all actuarial assumptions are exactly met. Actual experience will differ.

Development of Pension Actuarial Liabilities June 30, 2013

Teachers Pension

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	\$ 2,538,511,145	\$ 488,726,226	\$ 2,049,784,919
Disability benefits likely to be paid to present active members	1,914,766	1,544,423	370,343
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	16,757,065	6,220,533	10,536,532
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	126,381,790	178,476,292	(52,094,502)
Benefits likely to be paid to current inactive and vested deferred members	76,531,430	-	76,531,430
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	2,087,926,154	-	2,087,926,154
Total	\$ 4,848,022,350	\$ 674,967,474	\$ 4,173,054,876
Actuarial Value of Assets	\$ 2,255,011,456	-	\$ 2,255,011,456
Liabilities to be Covered by Future Contributions	\$ 2,593,010,894	\$ 674,967,474	\$ 1,918,043,420
Funded Ratio			54.0%

Teachers Pension
Unfunded Actuarial Accrued Liability Payoff Projection
(\$Millions)

Year	Fiscal Year Ending June 30,	Employer Contribution Rates	Projected Payroll	UAAL Beginning of Year	UAAL Payment	UAAL End of Year	Funded Ratio
		UAAL Payment					
	2014	10.27%	\$ 1,079	\$ 1,918	\$ 111	\$ 1,951	54.0%
	2015	10.27%	1,119	1,951	115	1,983	53.8%
1	2016	11.03%	1,161	1,983	128	2,004	54.7%
2	2017	11.03%	1,205	2,004	133	2,021	55.7%
3	2018	11.03%	1,250	2,021	138	2,034	56.7%
4	2019	11.03%	1,297	2,034	143	2,043	57.8%
5	2020	11.03%	1,346	2,043	148	2,048	58.9%
6	2021	11.03%	1,396	2,048	154	2,047	60.1%
7	2022	11.03%	1,448	2,047	160	2,040	61.3%
8	2023	11.03%	1,502	2,040	166	2,026	62.6%
9	2024	11.03%	1,558	2,026	172	2,004	64.0%
10	2025	11.03%	1,616	2,004	178	1,974	65.4%
11	2026	11.03%	1,677	1,974	185	1,935	67.0%
12	2027	11.03%	1,740	1,935	192	1,886	68.7%
13	2028	11.03%	1,805	1,886	199	1,826	70.6%
14	2029	11.03%	1,873	1,826	207	1,753	72.6%
15	2030	11.03%	1,943	1,753	214	1,667	74.7%
16	2031	11.03%	2,016	1,667	222	1,566	76.9%
17	2032	11.03%	2,092	1,566	231	1,448	79.3%
18	2033	11.03%	2,170	1,448	239	1,312	81.9%
19	2034	11.03%	2,251	1,312	248	1,156	84.6%
20	2035	11.03%	2,335	1,156	258	978	87.4%
21	2036	11.03%	2,423	978	267	777	90.3%
22	2037	11.03%	2,514	777	277	550	93.4%
23	2038	11.03%	2,608	550	288	294	96.6%
24	2039	11.03%	2,706	294	298	-	100.0%

The funded ratio is projected in this amortization schedule assuming all actuarial assumptions are exactly met. Actual experience will differ.

Development of Pension Actuarial Liabilities

June 30, 2013

Police Pension

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	\$ 966,849,287	\$ 184,316,685	\$ 782,532,602
Disability benefits likely to be paid to present active members	27,051,342	17,469,961	9,581,381
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	6,348,494	3,374,594	2,973,900
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	147,517,909	98,436,803	49,081,106
Benefits likely to be paid to current inactive and vested deferred members	12,041,100	-	12,041,100
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	1,160,172,826	-	1,160,172,826
Total	\$ 2,319,980,958	\$ 303,598,043	\$ 2,016,382,915
Actuarial Value of Assets	\$ 1,236,578,584	-	\$ 1,236,578,584
Liabilities to be Covered by Future Contributions	\$ 1,083,402,374	\$ 303,598,043	\$ 779,804,331
Funded Ratio			61.3%

Police Pension
Unfunded Actuarial Accrued Liability Payoff Projection
(\$Millions)

Year	Fiscal Year Ending June 30,	Employer Contribution Rates		Projected Payroll	UAAL Beginning of Year	UAAL Payment	UAAL End of Year	Funded Ratio
		UAAL	Payment					
	2014	16.29%	\$ 277	\$ 780	\$ 45	\$ 794	61.3%	
	2015	16.29%	287	794	47	807	61.4%	
1	2016	17.48%	298	807	52	816	62.4%	
2	2017	17.48%	309	816	54	823	63.3%	
3	2018	17.48%	321	823	56	829	64.3%	
4	2019	17.48%	333	829	58	833	65.3%	
5	2020	17.48%	345	833	60	835	66.4%	
6	2021	17.48%	358	835	63	835	67.4%	
7	2022	17.48%	371	835	65	832	68.5%	
8	2023	17.48%	385	832	67	827	69.7%	
9	2024	17.48%	399	827	70	818	70.9%	
10	2025	17.48%	414	818	72	807	72.1%	
11	2026	17.48%	430	807	75	791	73.5%	
12	2027	17.48%	446	791	78	772	74.9%	
13	2028	17.48%	463	772	81	747	76.5%	
14	2029	17.48%	480	747	84	718	78.1%	
15	2030	17.48%	498	718	87	683	79.9%	
16	2031	17.48%	517	683	90	643	81.7%	
17	2032	17.48%	536	643	94	595	83.7%	
18	2033	17.48%	556	595	97	540	85.8%	
19	2034	17.48%	577	540	101	477	88.0%	
20	2035	17.48%	599	477	105	405	90.2%	
21	2036	17.48%	621	405	109	324	92.5%	
22	2037	17.48%	644	324	113	231	94.9%	
23	2038	17.48%	668	231	117	128	97.3%	
24	2039	17.48%	693	128	121	-	100.0%	

The funded ratio is projected in this amortization schedule assuming all actuarial assumptions are exactly met. Actual experience will differ.

Development of Pension Actuarial Liabilities

June 30, 2013

Fire Pension

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	\$ 551,023,473	\$ 141,670,606	\$ 409,352,867
Disability benefits likely to be paid to present active members	13,846,004	9,349,332	4,496,672
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	2,588,273	1,421,273	1,167,000
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	27,423,296	22,044,994	5,378,302
Benefits likely to be paid to current inactive and vested deferred members	2,111,119	-	2,111,119
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	541,859,908	-	541,859,908
Total	\$ 1,138,852,073	\$ 174,486,205	\$ 964,365,868
Actuarial Value of Assets	\$ 601,612,058	-	\$ 601,612,058
Liabilities to be Covered by Future Contributions	\$ 537,240,015	\$ 174,486,205	\$ 362,753,810
Funded Ratio			62.4%

Fire Pension
Unfunded Actuarial Accrued Liability Payoff Projection
(\$Millions)

Year	Fiscal Year Ending June 30,	Employer Contribution Rates	Projected Payroll	UAAL Beginning of Year	UAAL Payment	UAAL End of Year	Funded Ratio
		UAAL Payment					
	2014	17.23%	\$ 120	\$ 363	\$ 21	\$ 369	62.4%
	2015	17.23%	125	369	22	375	62.5%
1	2016	18.76%	130	375	24	379	63.3%
2	2017	18.76%	135	379	25	382	64.2%
3	2018	18.76%	140	382	26	385	65.0%
4	2019	18.76%	145	385	27	387	65.9%
5	2020	18.76%	150	387	28	388	66.8%
6	2021	18.76%	156	388	29	388	67.7%
7	2022	18.76%	162	388	30	387	68.6%
8	2023	18.76%	168	387	32	384	69.6%
9	2024	18.76%	174	384	33	379	70.7%
10	2025	18.76%	181	379	34	373	71.7%
11	2026	18.76%	188	373	35	366	72.7%
12	2027	18.76%	195	366	37	356	73.8%
13	2028	18.76%	202	356	38	344	75.0%
14	2029	18.76%	210	344	39	330	76.2%
15	2030	18.76%	218	330	41	313	77.4%
16	2031	18.76%	226	313	42	294	78.8%
17	2032	18.76%	234	294	44	271	80.3%
18	2033	18.76%	243	271	46	244	82.1%
19	2034	18.76%	252	244	47	214	84.1%
20	2035	18.76%	261	214	49	180	86.3%
21	2036	18.76%	271	180	51	141	89.1%
22	2037	18.76%	281	141	53	97	92.3%
23	2038	18.76%	292	97	55	47	96.2%
24	2039	18.76%	303	47	57	-	100.0%

The funded ratio is projected in this amortization schedule assuming all actuarial assumptions are exactly met. Actual experience will differ.

SECTION C
FUND ASSETS

Comparative Balance Sheet At Market Value

	June 30, 2013	June 30, 2012
ASSETS		
Current Assets		
Cash - Local Custodian	\$ 7,697,561	\$ 6,876,015
Contributions Receivable	56,367,007	62,253,903
OPEB Plan Receivable	10,881,812	9,890,610
Receivable for Investments Sold	275,684,464	153,903,218
Interest and Dividends Receivable	17,577,403	17,836,417
Other Receivables	1,209,108	0
Foreign Taxes Receivable	2,748,017	2,168,661
Prepaid Management Fees	98,925	110,970
Total Current Assets	\$ 372,264,297	\$ 253,039,794
Capital Assets (Net of Accumulated Depreciation)	206,699	645,125
Investments at Quoted Market Value:		
Domestic Investments	2,816,863,094	2,338,824,308
International Investments	1,074,663,989	949,051,353
Global Investments	196,666,333	167,810,286
Fixed Income Investments	1,467,978,524	1,559,057,309
Investments at Fair Market Value:		
Alternative Investments	194,590,711	100,977,092
Absolute Return Strategies	25,692,568	41,683,445
Commercial R/E Investments (Net Equity)	572,554,877	514,753,988
Temporary Investments	4,137,332	30,132,432
TOTAL ASSETS	\$ 6,725,618,424	\$ 5,955,975,132
LIABILITIES		
Management Fees & Other Payables	\$ 8,556,618	\$ 8,042,219
OPEB Plan Payable	10,881,812	9,890,610
Payable for Investments Purchased	278,170,967	163,699,131
TOTAL LIABILITIES	\$ 297,609,397	\$ 181,631,960
TOTAL FUND BALANCES	\$ 6,428,009,027	\$ 5,774,343,172

Reconciliation of System Assets

Item	June 30, 2013				
	Employees	Teachers	Police#	Fire#	Total
A. Market Value of Assets at Beginning of Year	\$ 1,879,152,930	\$ 2,139,917,892	\$ 1,177,876,031	\$ 577,396,320	\$ 5,774,343,173
B. Revenues and Expenditures					
1. Contributions					
a. Employee Contributions	\$ 77,753,391	\$ 74,065,615	\$ 30,956,232	\$ 13,713,381	\$ 196,488,619
b. Employer Contributions	102,408,148	116,679,060	53,825,053	26,635,283	299,547,544
c. Total	\$ 180,161,539	\$ 190,744,675	\$ 84,781,285	\$ 40,348,664	\$ 496,036,163
2. Investment Return					
a. Interest, Dividends, and Other Income	\$ 49,964,506	\$ 56,252,940	\$ 31,132,398	\$ 15,252,788	\$ 152,602,632
b. Net Realized and Unrealized Gains/(Losses)	225,020,429	253,448,489	140,426,360	68,806,627	687,701,905
c. Investment Expenses	(7,208,281)	(8,121,358)	(4,487,922)	(2,199,334)	(22,016,895)
d. Net Investment Income	\$ 267,776,654	\$ 301,580,071	\$ 167,070,836	\$ 81,860,081	\$ 818,287,642
3. Benefits and Refunds					
a. Refunds	\$ (13,521,120)	\$ (5,718,568)	\$ (3,554,727)	\$ (396,569)	\$ (23,190,984)
b. Regular Monthly Benefits	(184,409,945)	(228,476,676)	(105,741,038)	(51,929,423)	(570,557,082)
c. Partial Lump-Sum Benefits Paid	(1,628,893)	(810,368)	(305,174)	(168,799)	(2,913,234)
d. Medical Premium Subsidy Payments	(14,206,161)	(24,730,323)	(10,466,797)	(5,741,729)	(55,145,010)
e. Total	\$ (213,766,119)	\$ (259,735,935)	\$ (120,067,736)	\$ (58,236,520)	\$ (651,806,310)
4. Administrative Expenses	\$ (2,303,445)	\$ (2,594,751)	\$ (1,435,379)	\$ (703,240)	\$ (7,036,815)
5. Miscellaneous Expenses	\$ (594,058)	\$ (669,361)	\$ (370,069)	\$ (181,338)	\$ (1,814,826)
6. Interest Expense on OPEB Deficit	\$ -	\$ (933,072)	\$ -	\$ -	\$ (933,072)
7. Interest Income on OPEB Deficit	\$ 690,473	\$ -	\$ 84,911	\$ 157,688	\$ 933,072
8. Transfers	\$ -	\$ -	\$ -	\$ -	\$ -
C. Market Value of Assets at End of Year	\$ 2,111,117,974	\$ 2,368,309,519	\$ 1,307,939,879	\$ 640,641,655	\$ 6,428,009,027

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

Development of Actuarial Value of Assets

Year Ended June 30:	2011	2012	2013	2014	2015	2016	2017
A. Funding Value Beginning of Year	\$ 5,569,340,728	\$5,798,249,321	\$ 5,846,570,198				
B. Market Value End of Year	5,891,179,192	5,774,343,173	6,428,009,027				
C. Market Value Beginning of Year	4,898,338,838	5,891,179,192	5,774,343,173				
D. Non-Investment Net Cash Flow	(150,146,624)	(135,992,268)	(164,621,788)				
E. Investment Income							
E1. Market Total: B - C - D	1,142,986,978	19,156,249	818,287,642				
E2. Assumed Rate	8.50%	7.75%	7.75%				
E3. Amount for Immediate Recognition	467,012,730	444,094,622	446,730,096				
E4. Amount for Phased-In Recognition: E1-E3	675,974,248	(424,938,373)	371,557,546				
F. Phased-In Recognition of Investment Income							
F1. Current Year: 0.20 x E3	135,194,850	(84,987,675)	74,311,509				
F2. First Prior Year	22,831,769	135,194,850	(84,987,675)	\$ 74,311,509			
F3. Second Prior Year	(183,524,414)	22,831,769	135,194,850	(84,987,675)	\$ 74,311,509		
F4. Third Prior Year	(149,296,007)	(183,524,414)	22,831,769	135,194,850	(84,987,675)	\$ 74,311,509	
F5. Fourth Prior Year	86,836,289	(149,296,007)	(183,524,414)	22,831,769	135,194,849	(84,987,673)	\$ 74,311,510
F6. Total Recognized Investment Gain	(87,957,513)	(259,781,477)	(36,173,961)	147,350,453	124,518,683	(10,676,164)	74,311,510
G. Preliminary Funding Value End of Year: A + D + E3 + F6	\$ 5,798,249,321	\$5,846,570,198	\$6,092,504,545				
H. Additional Recognized G/L due to Corridor	-	-	-				
I. Final Funding Value after 20% Corridor	\$ 5,798,249,321	\$5,846,570,198	\$ 6,092,504,545				
J. Difference between Market & Funding Value: B-I	\$ 92,929,871	\$ (72,227,025)	\$ 335,504,482				
K. Recognized Rate of Return	6.90%	3.22%	7.12%				
L. Market Rate of Return	23.70%	0.33%	14.38%				
M. Ratio of Funding Value to Market Value	98.42%	101.25%	94.78%				

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
June 30, 2013

	Employees	Teachers	Police	Fire	Total
Allocated Fund Assets (Actuarial Value)	\$ 2,000,929,962	\$ 2,244,697,611	\$ 1,239,673,065	\$ 607,203,907	\$ 6,092,504,545
Less Reserve for TSAs	-	-	-	-	-
Less 401(h) Account	(23,450,802)	10,313,845	(3,094,481)	(5,591,849)	(21,823,287)
Net Pension Valuation Assets	\$ 1,977,479,160	\$ 2,255,011,456	\$ 1,236,578,584	\$ 601,612,058	\$ 6,070,681,258

The allocation of the valuation assets to the member classifications is based on a prorata share weighted by the market value of assets net of the reserve for TSAs payable July 1, 2013.

SECTION D

ACCOUNTING DISCLOSURES

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 Pension Funding Progress
(As Required by GASB Statement No. 25)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percent of Covered Payroll [(b)-(a)]/(c)
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 %
June 30, 2009*	4,937,319,506	8,475,051,817	3,537,732,311	58.3%	2,448,287,042	144.5 %
June 30, 2010	5,233,838,359	8,953,932,346	3,720,093,987	58.5%	2,481,383,620	149.9 %
June 30, 2011#*	5,740,516,293	9,998,251,218	4,257,734,925	57.4%	2,517,779,470	169.1 %
June 30, 2012	5,817,881,588	10,361,600,451	4,543,718,863	56.1%	2,487,757,437	182.6 %
June 30, 2013	6,070,681,258	10,708,768,437	4,638,087,179	56.7%	2,501,741,708	185.4 %

* After Benefit/Legislative changes.

After Assumption changes/methods.

Schedule of Employer Pension Contributions

Fiscal Year Ending June 30	GASB No. 25 Annual Required Contribution (ARC)*			Employer Contributions		
	Projected Payroll (\$ Thousands)	ARC as % of Payroll	Projected ARC ^{##} (\$ Thousands)	Actual Payroll (\$ Thousands)	Actual Contribution (\$ Thousands)	% of GASB ARC Contributed
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2008#	\$ 2,294,130	10.52 %	\$ 241,456	\$ 2,308,321	\$ 249,898	75 %
2009#	2,397,365	10.52 %	252,321	2,448,287	261,450	75 %
2010	2,505,247	10.70 %	268,061	2,481,384	269,677	100 %
2011	2,617,983	10.70 %	280,124	2,517,779	274,582	100 %
2012	2,793,902	10.23 %	285,816	2,487,757	254,557	100 %
2013	2,919,628	9.97 %	291,087	2,501,742	249,836	100 %
2014	2,811,784	12.79 %	359,627			
2015	2,917,226	12.79 %	373,113			
2016	2,793,874	13.55 %	378,570			
2017	2,898,644	13.55 %	392,766			

* 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. ARC amounts for 2012 and beyond are estimated based on the contribution rate in effect and the wage inflation rate from the rate setting valuation. For the 2016-17 biennium, the ARC is computed based on the June 30, 2013 valuation.

Developed by prior actuary. Actual contributions are based on the ARC % times actual payroll. For FY 2008 and 2009 25% of the total contribution was paid to the 401(h) subtrust and 75% to the pension trust.

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

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, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Equivalent Single Amortization Period	24 Years
Valuation Asset Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return *	7.75%
Projected Salary Increase *	4.15% to 24.55%
* <i>Includes Price Inflation at</i>	3.00%
Rate of Payroll Growth	3.75%
Cost-of-Living Adjustments	None

Post-Retirement Medical Subsidy
GASB Statement No. 43 Reporting

Determination of the Annual Required Contribution for Fiscal Years 2016 and 2017	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%	0.66%	0.10%
Termination	0.00%	0.00%	0.00%	0.03%	0.00%
Death-in-Service	0.00%	0.00%	0.00%	0.02%	0.00%
Disability	0.00%	0.00%	0.00%	0.06%	0.01%
Total Normal Cost	0.00%	0.00%	0.00%	0.77%	0.11%
Amortization of Unfunded Actuarial Accrued Liabilities#					
	1.64%	0.31%	2.95%	3.07%	2.10%
Annual Required Contribution (ARC)	1.64%	0.31%	2.95%	3.84%	2.21%
Fiscal Year 2016 (ARC)					
Percent of Payroll	1.64%	0.31%	2.95%	3.84%	2.21%
Estimated Dollars	\$ 8,938,138	\$ 2,046,811	\$ 34,260,354	\$ 16,405,855	\$ 61,651,158
Fiscal Year 2017 (ARC)					
Percent of Payroll	1.64%	0.31%	2.95%	3.84%	2.21%
Estimated Dollars	\$ 9,273,318	\$ 2,123,567	\$ 35,545,117	\$ 17,021,074	\$ 63,963,076

Accrued Medical Subsidy Liabilities, \$731,872,112 were more than applicable assets of \$21,823,287.

The calculations above show the estimated employer's Annual Required Contribution (ARC) for the years ended June 30, 2016 and June 30, 2017.

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

**Determination of Unfunded Actuarial Accrued Liability (Medical)
as of June 30, 2013**

	State Employees	Political Subdivision Employees	Teachers	Police & Fire	Total
A. Present Value of Future Medical Benefits					
1. Retirees and Beneficiaries	\$ 81,643,039	\$ 67,667,310	\$ 245,464,701	\$ 183,593,026	\$ 578,368,076
2. Vested Terminated Members	-	-	-	-	-
3. Active Members	-	-	-	172,376,460	172,376,460
Total Present Value of Future Medical Benefits	81,643,039	67,667,310	245,464,701	355,969,486	750,744,536
B. Present Value of Future Employer Normal Costs	-	-	-	18,872,424	18,872,424
C. Present Value of Future Contributions from Current Active Members	-	-	-	-	-
D. Actuarial Medical Accrued Liability (A.-B.-C.)	81,643,039	67,667,310	245,464,701	337,097,062	731,872,112
E. 401(h) Subtrust Actuarial Value of Assets	94,597	23,356,205	(10,313,845)	8,686,330	21,823,287
F. Unfunded Actuarial Accrued Liability (D.-E.)	\$ 81,548,442	\$ 44,311,105	\$ 255,778,546	\$ 328,410,732	\$ 710,048,825

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.

Notes to Required Supplementary Information (As Required by GASB Statement No. 43)

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, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Equivalent Single Amortization Period	11 Years*
Valuation Asset Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return @	3.75%
Projected Salary Increase @	4.15% to 24.55%
@ Includes Price Inflation at	3.00%
Rate of Payroll Growth	3.75%
Increase in Medical Supplement	None

* The ARC is based on the greater of a 24 year amortization or the amount necessary to meet cash flow.

NHRS - 401(h) Cash Flow Projections

June 30, 2013

State Employees

Year Ending	Valuation	Employer Contributions			Benefits	Solvency
	Pay	Rate -- Total	Rate -- Health	Dollars -- Health	Paid	Assets
6/30/2013	\$ 488,021,432					\$ 99,806
6/30/2014	506,322,236	12.13%	1.62%	\$ 8,202,420	\$8,623,690	-
6/30/2015	525,309,320	12.13%	1.62%	8,510,011	8,192,428	329,889
6/30/2016	545,008,420	12.50%	1.64%	8,938,138	7,771,055	1,567,763
6/30/2017	565,446,236	12.50%	1.64%	9,273,318	7,352,708	3,684,298
6/30/2018	586,650,470	12.04%	1.18%	6,950,580	6,950,580	-
6/30/2019	608,649,863	11.94%	1.08%	6,556,008	6,556,008	-
6/30/2020	631,474,233	11.84%	0.98%	6,174,497	6,174,497	-
6/30/2021	655,154,517	11.75%	0.89%	5,803,162	5,803,162	-
6/30/2022	679,722,811	11.66%	0.80%	5,434,095	5,434,095	-
6/30/2023	705,212,416	11.58%	0.72%	5,072,716	5,072,716	-
6/30/2024	731,657,882	11.50%	0.64%	4,714,723	4,714,723	-
6/30/2025	759,095,053	11.43%	0.57%	4,360,765	4,360,765	-
6/30/2026	787,561,117	11.37%	0.51%	4,014,302	4,014,302	-
6/30/2027	817,094,659	11.31%	0.45%	3,673,460	3,673,460	-
6/30/2028	847,735,709	11.25%	0.39%	3,345,542	3,345,542	-
6/30/2029	879,525,798	11.20%	0.34%	3,031,560	3,031,560	-
6/30/2030	912,508,015	11.16%	0.30%	2,736,821	2,736,821	-
6/30/2031	946,727,066	11.12%	0.26%	2,450,514	2,450,514	-
6/30/2032	982,229,331	11.08%	0.22%	2,177,332	2,177,332	-
6/30/2033	1,019,062,931	11.05%	0.19%	1,925,476	1,925,476	-
6/30/2034	1,057,277,791	11.02%	0.16%	1,692,163	1,692,163	-
6/30/2035	1,096,925,708	10.99%	0.13%	1,476,859	1,476,859	-
6/30/2036	1,138,060,422	10.97%	0.11%	1,280,577	1,280,577	-
6/30/2037	1,180,737,688	10.95%	0.09%	1,103,652	1,103,652	-

NHRS - 401(h) Cash Flow Projections June 30, 2013

Political Subdivision Employees

Year Ending	Valuation Pay	Employer Contribution			Benefits Paid	Solvency Assets
		Rate -- Total	Rate -- Health	Dollars -- Health		
6/30/2013	\$ 591,223,592					\$ 24,642,394
6/30/2014	613,394,477	10.77%	0.33%	\$ 2,024,202	\$6,438,410	21,966,921
6/30/2015	636,396,770	10.77%	0.33%	2,100,109	6,139,770	19,473,160
6/30/2016	660,261,649	11.17%	0.31%	2,046,811	5,871,110	17,009,839
6/30/2017	685,021,461	11.17%	0.31%	2,123,567	5,633,130	14,682,543
6/30/2018	710,709,766	11.17%	0.31%	2,203,200	5,405,064	12,494,504
6/30/2019	737,361,382	11.17%	0.31%	2,285,820	5,184,539	10,451,783
6/30/2020	765,012,434	11.17%	0.31%	2,371,539	4,976,837	8,555,543
6/30/2021	793,700,400	11.17%	0.31%	2,460,471	4,761,761	6,828,133
6/30/2022	823,464,165	11.17%	0.31%	2,552,739	4,541,977	5,290,992
6/30/2023	854,344,071	11.17%	0.31%	2,648,467	4,315,320	3,969,601
6/30/2024	886,381,974	11.17%	0.31%	2,747,784	4,087,546	2,885,567
6/30/2025	919,621,298	11.17%	0.31%	2,850,826	3,854,684	2,066,442
6/30/2026	954,107,097	11.17%	0.31%	2,957,732	3,619,353	1,539,332
6/30/2027	989,886,113	11.17%	0.31%	3,068,647	3,381,415	1,333,743
6/30/2028	1,027,006,842	11.17%	0.31%	3,139,703	3,139,703	-
6/30/2029	1,065,519,599	11.13%	0.27%	2,897,993	2,897,993	-
6/30/2030	1,105,476,584	11.10%	0.24%	2,657,726	2,657,726	-
6/30/2031	1,146,931,956	11.07%	0.21%	2,422,811	2,422,811	-
6/30/2032	1,189,941,904	11.04%	0.18%	2,192,170	2,192,170	-
6/30/2033	1,234,564,725	11.02%	0.16%	1,968,683	1,968,683	-
6/30/2034	1,280,860,902	11.00%	0.14%	1,753,483	1,753,483	-
6/30/2035	1,328,893,186	10.98%	0.12%	1,548,254	1,548,254	-
6/30/2036	1,378,726,680	10.96%	0.10%	1,354,616	1,354,616	-
6/30/2037	1,430,428,931	10.94%	0.08%	1,174,025	1,174,025	-

NHRS - 401(h) Cash Flow Projections
June 30, 2013

Teachers

Year Ending	Valuation Pay	Employer Contributions			Benefits Paid	Solvency Assets
		Rate -- Total	Rate -- Health	Dollars -- Health		
6/30/2013	\$1,039,933,370					\$ (10,881,812)
6/30/2014	1,078,930,871	14.16%	2.20%	\$ 23,736,479	\$23,088,409	(11,051,970)
6/30/2015	1,119,390,779	14.16%	2.20%	24,626,597	21,875,812	(9,051,119)
6/30/2016	1,161,367,933	15.67%	2.95%	34,260,354	20,812,593	4,216,281
6/30/2017	1,204,919,230	15.67%	2.95%	35,545,117	19,816,180	20,881,476
6/30/2018	1,250,103,701	14.23%	1.51%	18,929,223	18,929,223	-
6/30/2019	1,296,982,590	14.12%	1.40%	18,196,984	18,196,984	-
6/30/2020	1,345,619,437	14.02%	1.30%	17,516,671	17,516,671	-
6/30/2021	1,396,080,166	13.93%	1.21%	16,846,386	16,846,386	-
6/30/2022	1,448,433,172	13.84%	1.12%	16,165,962	16,165,962	-
6/30/2023	1,502,749,416	13.75%	1.03%	15,466,348	15,466,348	-
6/30/2024	1,559,102,519	13.67%	0.95%	14,746,665	14,746,665	-
6/30/2025	1,617,568,863	13.59%	0.87%	14,006,502	14,006,502	-
6/30/2026	1,678,227,695	13.51%	0.79%	13,247,989	13,247,989	-
6/30/2027	1,741,161,234	13.44%	0.72%	12,473,897	12,473,897	-
6/30/2028	1,806,454,780	13.37%	0.65%	11,687,341	11,687,341	-
6/30/2029	1,874,196,834	13.30%	0.58%	10,890,763	10,890,763	-
6/30/2030	1,944,479,215	13.24%	0.52%	10,089,358	10,089,358	-
6/30/2031	2,017,397,186	13.18%	0.46%	9,289,360	9,289,360	-
6/30/2032	2,093,049,580	13.13%	0.41%	8,494,568	8,494,568	-
6/30/2033	2,171,538,939	13.08%	0.36%	7,710,471	7,710,471	-
6/30/2034	2,252,971,649	13.03%	0.31%	6,942,967	6,942,967	-
6/30/2035	2,337,458,086	12.99%	0.27%	6,198,109	6,198,109	-
6/30/2036	2,425,112,764	12.95%	0.23%	5,482,162	5,482,162	-
6/30/2037	2,516,054,493	12.91%	0.19%	4,801,635	4,801,635	-

NHRS - 401(h) Cash Flow Projections
June 30, 2013

Police and Fire

<u>Year Ending</u>	<u>Valuation Pay</u>	<u>Employer Contributions</u>			<u>Benefits Paid</u>	<u>Solvency Assets</u>
		<u>Rate -- Total</u>	<u>Rate -- Health</u>	<u>Dollars -- Health</u>		
6/30/2013	\$ 382,563,314					\$ 9,164,673
6/30/2014	396,909,438	N/A	3.95%	\$ 15,677,923	\$16,489,348	9,032,068
6/30/2015	411,793,542	N/A	3.95%	16,265,845	17,361,212	8,594,241
6/30/2016	427,235,800	N/A	3.84%	16,405,855	18,118,596	7,481,184
6/30/2017	443,257,143	N/A	3.84%	17,021,074	18,790,844	6,222,627
6/30/2018	459,879,286	N/A	3.84%	17,659,365	19,369,946	4,928,015
6/30/2019	477,124,759	N/A	3.84%	18,321,591	19,979,108	3,588,190
6/30/2020	495,016,937	N/A	3.84%	19,008,650	20,546,909	2,268,408
6/30/2021	513,580,072	N/A	3.84%	19,721,475	21,022,113	1,093,173
6/30/2022	532,839,325	N/A	3.84%	20,461,030	21,326,970	278,399
6/30/2023	552,820,800	N/A	3.84%	21,228,319	21,470,279	48,638
6/30/2024	573,551,580	N/A	3.74%	21,455,546	21,455,546	-
6/30/2025	595,059,764	N/A	3.58%	21,315,465	21,315,465	-
6/30/2026	617,374,505	N/A	3.40%	21,018,434	21,018,434	-
6/30/2027	640,526,049	N/A	3.23%	20,668,037	20,668,037	-
6/30/2028	664,545,776	N/A	3.05%	20,244,874	20,244,874	-
6/30/2029	689,466,243	N/A	2.86%	19,739,818	19,739,818	-
6/30/2030	715,321,227	N/A	2.68%	19,174,010	19,174,010	-
6/30/2031	742,145,773	N/A	2.50%	18,542,217	18,542,217	-
6/30/2032	769,976,239	N/A	2.32%	17,844,049	17,844,049	-
6/30/2033	798,850,348	N/A	2.14%	17,129,737	17,129,737	-
6/30/2034	828,807,236	N/A	1.98%	16,380,956	16,380,956	-
6/30/2035	859,887,507	N/A	1.81%	15,603,475	15,603,475	-
6/30/2036	892,133,289	N/A	1.66%	14,817,105	14,817,105	-
6/30/2037	925,588,287	N/A	1.52%	14,027,799	14,027,799	-

SECTION E
PARTICIPANT DATA

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	3.99%	17,509
2009	2,152	51,234	521	8,349	24,501	443,325	3.34%	18,094
2010	2,161	50,732	817	12,002	25,845	482,055	3.08%	18,652
2011	1,965	42,344	680	10,051	27,130	514,348	1.65%	18,959
2012	2,073	41,213	749	11,543	28,454	544,018	0.84%	19,119
2013	2,153	43,865	878	14,738	29,729	573,145	0.84%	19,279

* Includes additional COLA allowances. The benefit amounts shown are the monthly benefits as of the valuation date 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					\$ -	\$ -
45 - 49	6	\$ 183,737	\$30,623	6	53,255	8,876
50 - 54	57	893,973	15,684	91	1,212,342	13,322
55 - 59	253	5,188,172	20,507	332	4,880,183	14,699
60 - 64	990	20,224,090	20,428	1,353	19,394,317	14,334
65 - 69	1,429	23,186,009	16,225	1,872	21,705,411	11,595
70 - 74	1,045	14,873,474	14,233	1,439	14,265,640	9,914
75 - 79	780	9,932,388	12,734	897	7,730,584	8,618
80 - 84	504	6,662,138	13,219	584	4,932,875	8,447
85 - 89	280	3,043,379	10,869	352	2,816,526	8,001
90 - 94	82	842,231	10,271	156	1,030,179	6,604
95 - 99	16	106,028	6,627	32	208,820	6,526
100 & Over	3	14,573	4,858	6	46,272	7,712
TOTAL	5,445	\$ 85,150,192	\$15,638	7,120	\$78,276,404	\$10,994

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
30 - 34				1	\$ 21,492	\$21,492
35 - 39	1	\$ 14,049	\$14,049	5	68,597	13,719
40 - 44	7	97,044	13,863	3	31,316	10,439
45 - 49	24	333,092	13,879	26	344,188	13,238
50 - 54	51	777,831	15,252	50	567,997	11,360
55 - 59	72	1,010,763	14,038	99	1,274,592	12,875
60 - 64	93	1,280,557	13,769	113	1,373,887	12,158
65 - 69	84	1,182,402	14,076	92	1,093,023	11,881
70 - 74	46	607,706	13,211	49	646,594	13,196
75 - 79	24	253,011	10,542	16	185,941	11,621
80 - 84	10	159,699	15,970	9	122,740	13,638
85 - 89	2	23,256	11,628	4	45,129	11,282
90 - 94				3	43,918	14,639
95 - 99						
100 & Over						
TOTAL	414	\$ 5,739,410	\$13,863	470	\$ 5,819,414	\$12,382

Retirees and Beneficiaries Age Distribution Employees

BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
Under 20	1	\$ 1,774	\$ 1,774	3	\$ 8,613	\$ 2,871
20 - 24	1	3,603	3,603	1	1,774	1,774
25 - 29	1	1,921	1,921			
30 - 34	4	12,078	3,020	3	13,224	4,408
35 - 39	4	29,049	7,262	4	29,284	7,321
40 - 44	2	5,232	2,616	4	15,655	3,914
45 - 49	7	20,644	2,949	14	92,759	6,626
50 - 54	11	79,151	7,196	31	328,045	10,582
55 - 59	22	98,841	4,493	40	444,493	11,112
60 - 64	27	166,933	6,183	86	1,035,202	12,037
65 - 69	25	186,522	7,461	120	1,417,907	11,816
70 - 74	22	128,434	5,838	136	1,560,973	11,478
75 - 79	25	191,784	7,671	189	2,280,067	12,064
80 - 84	23	190,598	8,287	199	2,225,691	11,184
85 - 89	18	135,091	7,505	145	1,325,474	9,141
90 - 94	3	15,443	5,148	69	530,256	7,685
95 - 99	1	1,584	1,584	17	81,911	4,818
100 & Over				5	46,193	9,239
TOTAL	197	\$ 1,268,682	\$ 6,440	1,066	\$11,437,521	\$10,729

Retirees and Beneficiaries Age Distribution Teachers

SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
45 - 49				2	\$ 21,722	\$ 10,861
50 - 54	11	\$ 164,413	\$ 14,947	38	441,499	11,618
55 - 59	100	2,616,972	26,170	316	6,555,683	20,746
60 - 64	645	17,082,316	26,484	1,850	42,685,760	23,073
65 - 69	996	24,126,243	24,223	2,226	45,135,596	20,277
70 - 74	521	12,027,771	23,086	1,071	20,675,812	19,305
75 - 79	304	7,704,780	25,345	647	12,455,467	19,251
80 - 84	201	4,769,671	23,730	338	6,325,272	18,714
85 - 89	61	1,245,274	20,414	210	3,670,296	17,478
90 - 94	22	313,880	14,267	125	1,648,057	13,184
95 - 99	3	50,767	16,922	49	554,551	11,317
100 & Over				13	132,110	10,162
TOTAL	2,864	\$ 70,102,087	\$ 24,477	6,885	\$ 140,301,825	\$ 20,378

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
35 - 39				1	\$ 12,206	\$ 12,206
40 - 44	2	\$ 33,375	\$ 16,688			
45 - 49				4	47,854	11,964
50 - 54	2	40,870	20,435	7	101,398	14,485
55 - 59	3	46,471	15,490	25	478,424	19,137
60 - 64	11	176,805	16,073	33	550,613	16,685
65 - 69	7	161,270	23,039	28	457,985	16,357
70 - 74	9	188,738	20,971	15	259,636	17,309
75 - 79	4	80,584	20,146	11	192,244	17,477
80 - 84	8	128,030	16,004	10	135,799	13,580
85 - 89	3	38,161	12,720	4	47,378	11,845
90 - 94				3	36,835	12,278
95 - 99						
100 & Over						
TOTAL	49	\$ 894,304	\$ 18,251	141	\$ 2,320,372	\$ 16,457

Retirees and Beneficiaries Age Distribution Teachers

BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
25 - 29	1	\$ 4,741	\$ 4,741	1	\$ 13,182	\$ 13,182
30 - 34	1	3,246	3,246			
35 - 39	2	38,087	19,044	3	11,141	3,714
40 - 44	3	17,940	5,980	1	15,572	15,572
45 - 49	6	57,289	9,548	4	32,368	8,092
50 - 54	11	86,573	7,870	4	67,143	16,786
55 - 59	9	93,176	10,353	18	266,131	14,785
60 - 64	19	344,875	18,151	33	575,891	17,451
65 - 69	33	549,868	16,663	48	1,152,746	24,016
70 - 74	29	423,323	14,597	62	1,459,523	23,541
75 - 79	23	341,845	14,863	45	1,049,278	23,317
80 - 84	16	285,426	17,839	43	1,004,047	23,350
85 - 89	9	139,030	15,448	23	356,704	15,509
90 - 94	2	31,170	15,585	14	138,310	9,879
95 - 99				5	66,056	13,211
100 & Over						
TOTAL	164	\$2,416,589	\$14,735	304	\$6,208,092	\$20,421

Retirees and Beneficiaries Age Distribution Police

SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
35 - 39				1	\$ 25,057	\$ 25,057
40 - 44				7	52,071	7,439
45 - 49	196	\$ 10,140,856	\$ 51,739	33	935,799	28,358
50 - 54	378	18,938,479	50,102	69	1,855,529	26,892
55 - 59	368	17,853,955	48,516	74	1,764,661	23,847
60 - 64	361	14,779,336	40,940	62	1,426,824	23,013
65 - 69	326	11,381,785	34,913	49	730,786	14,914
70 - 74	205	6,345,823	30,955	33	557,930	16,907
75 - 79	112	2,817,119	25,153	18	270,017	15,001
80 - 84	62	1,437,165	23,180	10	152,064	15,206
85 - 89	20	750,047	37,502	4	71,682	17,921
90 - 94	4	70,696	17,674	1	6,072	6,072
95 - 99	4	98,385	24,596	1	5,901	5,901
100 & Over						
TOTAL	2,036	\$ 84,613,646	\$ 41,559	362	\$ 7,854,393	\$ 21,697

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
30 - 34	4	\$ 126,932	\$ 31,733	1	\$ 23,123	\$ 23,123
35 - 39	9	334,365	37,152	2	68,284	34,142
40 - 44	13	529,219	40,709	1	53,908	53,908
45 - 49	38	1,386,539	36,488	7	206,198	29,457
50 - 54	43	1,404,115	32,654	6	180,480	30,080
55 - 59	50	1,663,366	33,267	9	265,152	29,461
60 - 64	46	1,461,671	31,775	10	273,536	27,354
65 - 69	50	1,414,731	28,295	9	216,986	24,110
70 - 74	31	946,195	30,522	2	35,972	17,986
75 - 79	11	295,789	26,890	1	12,357	12,357
80 - 84	11	272,648	24,786	1	21,995	21,995
85 - 89						
90 - 94	2	24,381	12,191			
95 - 99						
100 & Over						
TOTAL	308	\$ 9,859,951	\$ 32,013	50	\$ 1,398,226	\$ 27,965

Retirees and Beneficiaries Age Distribution Police

BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
Under 20	1	\$ 10,821	\$ 10,821	1	\$ 30,418	\$ 30,418
20 - 24	1	10,821	10,821			
25 - 29	1	11,314	11,314			
30 - 34				1	11,314	11,314
35 - 39						
40 - 44	1	3,991	3,991	6	129,656	21,609
45 - 49	3	49,397	16,466	4	76,365	19,091
50 - 54	4	42,656	10,664	16	381,906	23,869
55 - 59	3	88,055	29,352	30	655,341	21,845
60 - 64	2	32,822	16,411	26	470,885	18,111
65 - 69	3	37,468	12,489	47	1,113,470	23,691
70 - 74				63	911,869	14,474
75 - 79	9	46,025	5,114	73	1,037,141	14,207
80 - 84				55	691,450	12,572
85 - 89	5	56,252	11,250	34	422,184	12,417
90 - 94				10	109,189	10,919
95 - 99	1	12,498	12,498	7	88,272	12,610
100 & Over						
TOTAL	34	\$ 402,120	\$ 11,827	373	\$ 6,129,460	\$ 16,433

Retirees and Beneficiaries Age Distribution Fire

SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
35 - 39						
40 - 44				1	\$ 2,284	\$ 2,284
45 - 49	57	\$ 2,796,229	\$49,057	13	231,764	17,828
50 - 54	130	7,258,056	55,831	22	357,546	16,252
55 - 59	207	10,398,614	50,235	20	263,212	13,161
60 - 64	217	10,022,929	46,189	19	307,588	16,189
65 - 69	144	5,610,011	38,958	9	156,007	17,334
70 - 74	93	3,405,421	36,617	2	30,433	15,217
75 - 79	66	2,062,031	31,243	3	40,477	13,492
80 - 84	35	976,879	27,911			
85 - 89	26	680,594	26,177	1	25,849	25,849
90 - 94	7	167,825	23,975			
95 - 99	1	19,511	19,511			
100 & Over						
TOTAL	983	\$43,398,100	\$44,149	90	\$1,415,160	\$15,724

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
35 - 39	2	\$ 42,453	\$21,227			
40 - 44	3	127,810	42,603			
45 - 49	8	293,086	36,636	1	\$31,795	\$31,795
50 - 54	11	322,714	29,338	2	76,735	38,368
55 - 59	20	717,359	35,868	1	26,454	26,454
60 - 64	20	581,820	29,091			
65 - 69	11	299,191	27,199			
70 - 74	22	578,230	26,283			
75 - 79	13	341,039	26,234			
80 - 84	6	166,281	27,714			
85 - 89	4	115,965	28,991			
90 - 94	1	3,039	3,039			
95 - 99	1	18,993	18,993			
100 & Over						
TOTAL	122	\$3,607,980	\$29,574	4	\$134,984	\$33,746

Retirees and Beneficiaries Age Distribution Fire

BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
Under 20	1	\$ 5,913	\$ 5,913			
20 - 24	1	5,913	5,913			
25 - 29				1	\$ 5,913	\$ 5,913
30 - 34						
35 - 39						
40 - 44	4	44,026	11,007	1	44,756	44,756
45 - 49				1	36,078	36,078
50 - 54				8	131,691	16,461
55 - 59	2	5,593	2,797	23	418,952	18,215
60 - 64				22	393,563	17,889
65 - 69				31	730,312	23,558
70 - 74				31	487,228	15,717
75 - 79	1	15,853	15,853	25	557,263	22,291
80 - 84				39	698,311	17,905
85 - 89	3	58,825	19,608	39	526,781	13,507
90 - 94				12	174,500	14,542
95 - 99				3	54,772	18,257
100 & Over						
TOTAL	12	\$136,123	\$11,344	236	\$4,260,120	\$18,051

Active Members by Valuation Division

Valuation Group	Active Members	Valuation Payroll	Average		
			Age	Service	Pay
Employees:					
Male	9,542	\$ 471,172,771	49.0	11.6	\$49,379
Female	15,267	608,072,253	49.2	10.8	39,829
Total	24,809	1,079,245,024	49.1	11.1	43,502
Teachers:					
Male	3,983	242,994,861	46.0	13.9	61,008
Female	14,101	796,938,509	46.5	13.1	56,516
Total	18,084	1,039,933,370	46.4	13.3	57,506
Police:					
Male	3,644	237,094,242	39.4	11.2	65,064
Female	543	29,681,055	39.2	8.9	54,661
Total	4,187	266,775,297	39.3	10.9	63,715
Fire:					
Male	1,562	112,879,263	41.2	13.1	72,266
Female	46	2,908,754	40.3	10.8	63,234
Total	1,608	115,788,017	41.1	13.0	72,007
Total:					
Male	18,731	1,064,141,137	45.8	12.1	56,812
Female	29,957	1,437,600,571	47.7	11.9	47,989
Grand Total	48,688	\$2,501,741,708	47.0	12.0	\$51,383

Valuation Group	Active Members	Valuation Payroll
Employees:		
State	9,949	\$ 488,021,432
Political Subdivisions	14,860	591,223,592
Subtotal	24,809	1,079,245,024
Teachers:	18,084	1,039,933,370
Police:		
State	1,077	69,484,154
Political Subdivisions	3,110	197,291,143
Subtotal	4,187	266,775,297
Fire:		
State	65	3,730,233
Political Subdivisions	1,543	112,057,784
Subtotal	1,608	115,788,017
Total	48,688	\$ 2,501,741,708

Age and Service Distribution

Employees
June 30, 2013

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	14							14	\$ 331,584
20-24	444	13						457	12,259,530
25-29	916	329	5					1,250	39,877,579
30-34	712	636	193	1				1,542	59,440,479
35-39	648	555	405	102	1			1,711	71,824,075
40-44	801	771	588	328	126	14		2,628	116,044,350
45-49	948	928	715	368	351	217	21	3,548	156,584,300
50-54	964	1,186	974	554	392	335	187	4,592	204,588,841
55-59	756	1,043	1,035	646	508	349	371	4,708	215,027,869
60-64	433	728	694	438	371	236	250	3,150	148,380,193
65-69	96	230	253	131	105	85	87	987	46,129,544
70+	20	55	59	31	26	18	13	222	8,756,680
TOTAL	6,752	6,474	4,921	2,599	1,880	1,254	929	24,809	\$1,079,245,024

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

Age: 49.1 years
Service: 11.1 years
Annual Pay: \$43,502

Age and Service Distribution

Teachers
June 30, 2013

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	124							124	\$ 4,383,094
25-29	1,019	301						1,320	52,940,561
30-34	631	1,276	176	1				2,084	97,008,129
35-39	376	726	958	110	1			2,171	116,829,390
40-44	395	583	678	552	66	1		2,275	131,732,713
45-49	311	550	479	434	341	91	2	2,208	130,867,937
50-54	228	494	600	382	290	461	98	2,553	156,575,524
55-59	128	348	528	493	338	407	488	2,730	174,023,008
60-64	76	215	312	394	324	271	489	2,081	138,784,096
65-69	15	52	87	93	71	66	100	484	33,191,759
70+	5	8	8	4	8	7	14	54	3,597,159
TOTAL	3,308	4,553	3,826	2,463	1,439	1,304	1,191	18,084	\$1,039,933,370

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

Age: 46.4 years
Service: 13.3 years
Annual Pay: \$57,506

Age and Service Distribution

Police
June 30, 2013

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	183	1						184	\$ 7,074,535
25-29	450	143						593	30,543,952
30-34	183	372	102	3				660	39,753,916
35-39	99	182	338	76	2			697	45,918,967
40-44	70	149	205	313	89	3		829	58,612,881
45-49	46	65	136	110	161	62	7	587	41,645,229
50-54	32	45	66	57	66	53	16	335	23,654,741
55-59	16	36	42	35	31	18	21	199	13,293,458
60-64	6	17	21	13	14	6	4	81	4,814,196
65-69	2	2	3	3	4	2	3	19	1,221,162
70+					2		1	3	242,260
TOTAL	1,087	1,012	913	610	369	144	52	4,187	\$ 266,775,297

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

Age: 39.3 years
Service: 10.9 years
Annual Pay: \$63,715

Age and Service Distribution

Fire
June 30, 2013

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	45							45	\$ 2,253,917
25-29	99	67						166	9,229,427
30-34	47	121	44	1				213	13,792,092
35-39	24	75	108	27				234	15,893,991
40-44	16	68	123	80	37	1		325	23,800,066
45-49	9	40	81	59	89	57		335	26,414,765
50-54	6	19	29	29	28	48	18	177	14,845,862
55-59	2	4	22	7	15	21	13	84	7,128,297
60-64	2	3	2	2	2	5	7	23	1,886,272
65-69	2						2	4	333,421
70+						1	1	2	209,907
TOTAL	252	397	409	205	171	133	41	1,608	\$ 115,788,017

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

Age: 41.1 years
Service: 13 years
Annual Pay: \$72,007

Age and Service Distribution

Total
June 30, 2013

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	14							14	\$ 331,584
20-24	796	14						810	25,971,076
25-29	2,484	840	5					3,329	132,591,519
30-34	1,573	2,405	515	6				4,499	209,994,616
35-39	1,147	1,538	1,809	315	4			4,813	250,466,423
40-44	1,282	1,571	1,594	1,273	318	19		6,057	330,190,010
45-49	1,314	1,583	1,411	971	942	427	30	6,678	355,512,231
50-54	1,230	1,744	1,669	1,022	776	897	319	7,657	399,664,968
55-59	902	1,431	1,627	1,181	892	795	893	7,721	409,472,632
60-64	517	963	1,029	847	711	518	750	5,335	293,864,757
65-69	115	284	343	227	180	153	192	1,494	80,875,886
70+	25	63	67	35	36	26	29	281	12,806,006
TOTAL	11,399	12,436	10,069	5,877	3,859	2,835	2,213	48,688	\$2,501,741,708

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

Age: 47.0 years
Service: 12.0 years
Annual Pay: \$51,383

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	51,060	N/A	\$2,043,568,262	N/A	\$40,023	N/A	45.2	9.9
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	5.1%	45,272	4.8%	45.7	10.6
2009	51,032	0.0%	2,448,287,042	6.1%	47,976	6.0%	46.0	10.9
2010	50,467	(0.6%)	2,481,383,620	1.4%	49,168	2.5%	46.3	11.1
2011	49,738	(0.7%)	2,517,779,470	1.5%	50,621	3.0%	46.6	11.4
2012	48,625	(1.1%)	2,487,757,437	(1.2%)	51,162	1.1%	46.9	11.8
2013	48,688	0.1%	2,501,741,708	0.6%	51,383	0.4%	47.0	12.0

* Average annual increase.

By Valuation Group (Valuation Payroll in Thousands)

	Fiscal Year	Active Members#	Valuation Payroll	Average Compensation	% Inc.*
Employees	2013	24,809	\$1,079,245	\$43,502	(0.03)%
Teachers		18,084	1,039,934	57,506	0.75 %
Police		4,187	266,775	63,715	0.20 %
Fire		1,608	115,788	72,007	2.39 %
Total		48,688	\$2,501,742	\$51,383	0.43 %

	Fiscal Year	Active Members#	Valuation Payroll	Average Compensation	% Inc.*
Employees	2012	24,747	\$1,076,831	\$43,514	(0.23)%
Teachers		18,161	1,036,605	57,079	1.70 %
Police		4,118	261,865	63,590	1.20 %
Fire		1,599	112,456	70,329	4.36 %
Total		48,625	\$2,487,757	\$51,162	1.07 %

Excludes temporary inactive members.

* Average annual increase.

Summary of Membership Data by Category

	June 30	
	2013	2012
Active Members		
Number	48,688	48,625
Average age (years)	47.0	46.9
Average service (years)	12.0	11.8
Average salary	\$ 51,383	\$ 51,162
Total payroll supplied, annualized	\$ 2,501,741,708	\$ 2,487,757,437
Vested Inactive Members		
Number	1,261	1,372
Average age (years)	52	52
Non-Vested Inactive Members		
Number	7,273	7,041
Service Retirees		
Number	25,785	24,622
Average age (years)	69	69
Total annual benefits	\$ 511,111,807	\$ 484,434,150
Average annual benefit	\$ 19,822	\$ 19,675
Disability Retirees		
Number	1,558	1,542
Average age (years)	62	62
Total annual benefits	\$ 29,774,641	\$ 29,220,458
Average annual benefit	\$ 19,111	\$ 18,950
Beneficiaries		
Number	2,386	2,290
Average age (years)	73	73
Total annual benefits	\$ 32,258,707	\$ 30,363,269
Average annual benefit	\$ 13,520	\$ 13,259
Total Covered Lives	86,951	85,492

SECTION F

OTHER GASB SCHEDULES OF INTEREST

Other Schedules of Interest

Distribution of Retirees by Years of Service

Service	Employees							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>		
Total annual benefit	\$ 3,759,186	\$ -	\$ 7,084,671	\$ 25,982,563	\$ 24,291,339	\$ 33,590,713	\$ 26,055,525	\$ 66,927,626	\$ 187,691,623
Average annual benefit	\$ 3,883	\$ -	\$ 4,906	\$ 7,013	\$ 10,359	\$ 13,801	\$ 18,691	\$ 27,633	\$ 12,758
Average monthly benefit	\$ 324	\$ -	\$ 409	\$ 584	\$ 863	\$ 1,150	\$ 1,558	\$ 2,303	\$ 1,063
Average final average salary	\$ 35,604	\$ -	\$ 39,229	\$ 40,738	\$ 45,238	\$ 47,897	\$ 54,324	\$ 63,541	\$ 47,906
Number of retired members	968	*	1,444	3,705	2,345	2,434	1,394	2,422	14,712 **

* Includes 172 members who did not have service reported.

** Includes 7,506 members who did not have FAS reported.

Service	Teachers							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>		
Total annual benefit	\$ 1,112,707	\$ -	\$ 1,610,315	\$ 10,451,930	\$ 14,570,000	\$ 35,686,579	\$ 40,112,617	\$ 118,699,121	\$ 222,243,269
Average annual benefit	\$ 5,200	\$ -	\$ 6,315	\$ 8,295	\$ 12,615	\$ 17,451	\$ 22,347	\$ 32,229	\$ 21,355
Average monthly benefit	\$ 433	\$ -	\$ 526	\$ 691	\$ 1,051	\$ 1,454	\$ 1,862	\$ 2,686	\$ 1,780
Average final average salary	\$ 51,604	\$ -	\$ 55,373	\$ 47,276	\$ 55,688	\$ 60,708	\$ 64,999	\$ 70,712	\$ 62,669
Number of retired members	214	*	255	1,260	1,155	2,045	1,795	3,683	10,407 **

* Includes 86 members who did not have service reported.

** Includes 5,020 members who did not have FAS reported.

Service	Police							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>		
Total annual benefit	\$ 3,239,807	\$ -	\$ 2,675,511	\$ 6,150,523	\$ 6,815,511	\$ 46,481,159	\$ 30,159,047	\$ 14,736,238	\$ 110,257,796
Average annual benefit	\$ 11,867	\$ -	\$ 16,827	\$ 18,305	\$ 25,149	\$ 35,240	\$ 51,642	\$ 66,680	\$ 34,859
Average monthly benefit	\$ 989	\$ -	\$ 1,402	\$ 1,525	\$ 2,096	\$ 2,937	\$ 4,304	\$ 5,557	\$ 2,905
Average final average salary	\$ 43,717	\$ -	\$ 51,752	\$ 49,166	\$ 60,656	\$ 76,404	\$ 90,096	\$ 98,639	\$ 77,294
Number of retired members	273	*	159	336	271	1,319	584	221	3,163 **

* Includes 177 members who did not have service reported.

** Includes 1,825 members who did not have FAS reported.

Service	Fire							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>		
Total annual benefit	\$ 1,511,597	\$ -	\$ 544,630	\$ 1,692,503	\$ 2,793,285	\$ 18,588,573	\$ 17,704,183	\$ 10,117,696	\$ 52,952,467
Average annual benefit	\$ 12,597	\$ -	\$ 18,154	\$ 20,640	\$ 24,080	\$ 32,216	\$ 48,638	\$ 64,036	\$ 36,595
Average monthly benefit	\$ 1,050	\$ -	\$ 1,513	\$ 1,720	\$ 2,007	\$ 2,685	\$ 4,053	\$ 5,336	\$ 3,050
Average final average salary	\$ 49,479	\$ -	\$ 64,928	\$ 55,062	\$ 62,052	\$ 75,328	\$ 90,016	\$ 93,076	\$ 81,986
Number of retired members	120	*	30	82	116	577	364	158	1,447 **

* Includes 99 members who did not have service reported.

** Includes 956 members who did not have FAS reported.

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

Employees

June 30, 2013																			
		Type of Retirement**							Option Selected #										
Amount of Monthly Benefit	Number of Retirees*	1	2	3	4	5	6	7	No. Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - \$500	4,501	3,698	42	2	10	-	517	232	2,655	178	307	75	848	189	12	5	-	-	232
501 - 1,000	4,519	3,432	258	132	7	2	369	319	2,497	123	287	98	886	294	11	4	-	-	319
1,001 - 1,500	2,605	2,083	76	222	6	4	141	73	1,339	89	211	79	582	227	4	1	-	-	73
1,501 - 2,000	1,480	1,263	21	85	4	2	82	23	686	41	140	60	392	132	3	3	-	-	23
2,001 - 2,500	895	806	4	24	-	2	53	6	366	14	89	39	295	83	1	2	-	-	6
2,501 - 3,000	546	497	3	8	2	1	33	2	208	14	71	24	155	72	-	-	-	-	2
3,001 - 3,500	321	302	-	3	-	-	15	1	113	6	47	16	103	35	-	-	-	-	1
3,501 - 4,000	234	223	1	1	-	-	9	-	77	3	32	17	74	30	1	-	-	-	-
Over 4,000	267	261	1	1	1	-	3	-	69	4	40	29	90	33	1	1	-	-	-
Totals	15,368	12,565	406	478	30	11	1,222	656	8,010	472	1,224	437	3,425	1,095	33	16	-	-	656

Teachers

June 30, 2013																			
		Type of Retirement**							Option Selected #										
Amount of Monthly Benefit	Number of Retirees*	1	2	3	4	5	6	7	No. Option	1	2	3	4	5	6	7	8	9	Other&
\$1 - \$500	1,270	1,044	-	-	-	-	64	162	572	42	81	27	295	80	6	5	-	-	162
501 - 1,000	1,809	1,382	49	-	1	-	105	272	912	97	93	26	326	76	6	1	-	-	272
1,001 - 1,500	1,530	1,289	69	4	5	-	79	84	747	61	111	43	373	108	3	-	-	-	84
1,501 - 2,000	1,599	1,473	25	6	5	-	65	25	713	54	127	46	467	160	1	6	-	-	25
2,001 - 2,500	1,599	1,514	16	8	-	1	55	5	688	39	119	62	489	192	2	3	-	-	5
2,501 - 3,000	1,285	1,242	8	2	-	-	33	-	530	41	117	44	386	161	1	5	-	-	-
3,001 - 3,500	992	961	2	1	-	-	28	-	423	24	87	37	311	104	2	4	-	-	-
3,501 - 4,000	513	495	-	-	2	-	16	-	213	20	49	20	142	69	-	-	-	-	-
Over 4,000	358	349	-	-	-	-	9	-	146	6	40	13	108	45	-	-	-	-	-
Totals	10,955	9,749	169	21	13	1	454	548	4,944	384	824	318	2,897	995	21	24	-	-	548

See Page 72 for footnotes.

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

Police

June 30, 2013																			
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	164	123	1	-	-	2	38	-	114	1	6	16	6	21	-	-	-	-	-
501 - 1,000	304	154	7	-	-	1	130	12	226	5	13	11	15	21	1	-	-	-	12
1,001 - 1,500	331	161	22	9	-	2	113	24	215	13	15	12	13	39	-	-	-	-	24
1,501 - 2,000	285	177	20	34	2	1	45	6	164	16	8	23	15	52	1	-	-	-	6
2,001 - 2,500	358	257	11	65	-	1	18	6	178	18	12	48	18	78	-	-	-	-	6
2,501 - 3,000	378	266	-	84	1	2	23	2	153	21	9	62	19	112	-	-	-	-	2
3,001 - 3,500	321	267	1	42	1	3	6	1	112	14	4	86	8	96	-	-	-	-	1
3,501 - 4,000	255	226	-	20	-	-	9	-	87	8	1	57	7	95	-	-	-	-	-
Over 4,000	818	767	1	41	1	1	7	-	198	19	10	252	13	325	1	-	-	-	-
Totals	3,214	2,398	63	295	5	13	389	51	1,447	115	78	567	114	839	3	-	-	-	51

Fire

June 30, 2013																			
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	43	25	-	1	-	2	15	-	33	-	2	-	2	6	-	-	-	-	-
501 - 1,000	105	37	1	-	-	-	67	-	95	-	2	1	1	6	-	-	-	-	-
1,001 - 1,500	151	66	8	7	-	5	64	1	115	7	7	7	7	7	-	-	-	-	1
1,501 - 2,000	126	65	9	13	-	2	34	3	80	10	5	9	9	10	-	-	-	-	3
2,001 - 2,500	178	120	2	24	1	3	28	-	95	14	9	24	7	29	-	-	-	-	-
2,501 - 3,000	165	127	2	26	-	-	9	1	61	8	5	27	12	51	-	-	-	-	1
3,001 - 3,500	146	126	1	15	-	2	2	-	38	7	3	35	2	61	-	-	-	-	-
3,501 - 4,000	128	118	-	7	-	1	1	1	34	5	1	29	2	56	-	-	-	-	1
Over 4,000	411	389	-	10	1	-	11	-	109	13	2	99	4	182	1	1	-	-	-
Totals	1,453	1,073	23	103	2	15	231	6	660	64	36	231	46	408	1	1	-	-	6

See Page 72 for footnotes.

**Type of Retirement

#Option Selected

1-Service & early retirement

No option - Straight life

2-Ordinary disability retirement

Option 1 - Cash refund

3-Accidental disability retirement

Option 2 - 100% Joint & Survivorship

4-Ordinary death in active service

Option 3 - 50% Joint & Survivorship

5-Accidental death in active service

Option 4 - 100% Pop-Up

6-Beneficiaries of deceased members who retired on a service or disability allowance

Option 5 - 50% Pop-Up

7-Vested member with future benefit

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. There are 3,121 retirees who are eligible for a deferred subsidy.
& 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	State Employees							<u>Total</u>
	<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 annual benefit	\$ 5,495	\$ 5,279	\$ 4,897	\$ 4,843	\$ 4,240	\$ 4,426	\$ 4,606	\$ 4,553
Average monthly benefit	\$ 458	\$ 440	\$ 408	\$ 404	\$ 353	\$ 369	\$ 384	\$ 379
Annual Benefits	\$428,585	\$369,538	\$435,853	\$203,412	\$2,213,280	\$1,575,687	\$3,624,803	\$8,851,158
Number of retired members	78	70	89	42	522	356	787	1,944

* Includes 4 members who did not have service reported.

Service	Political Subdivision Employees							<u>Total</u>
	<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 annual benefit	\$ 3,586	\$ 4,105	\$ 5,030	\$ 4,679	\$ 4,737	\$ 4,666	\$ 5,466	\$ 4,903
Average monthly benefit	\$ 299	\$ 342	\$ 419	\$ 390	\$ 395	\$ 389	\$ 455	\$ 409
Annual Benefits	\$57,378	\$41,047	\$60,359	\$18,717	\$2,965,642	\$1,446,483	\$2,000,382	\$6,590,008
Number of retired members	16	10	12	4	626	310	366	1,344

* Includes 6 members who did not have service reported.

Service	Teachers							<u>Total</u>
	<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 annual benefit	\$ 3,424	\$3,952	\$ 5,546	\$4,263	\$ 4,818	\$ 4,914	\$ 5,866	\$ 5,410
Average monthly benefit	\$ 285	\$ 329	\$ 462	\$ 355	\$ 402	\$ 410	\$ 489	\$ 451
Annual Benefits	\$47,941	\$11,856	\$27,731	\$8,526	\$4,808,676	\$4,703,090	\$14,142,923	\$23,750,743
Number of retired members	14	3	5	2	998	957	2,411	4,390

* Includes 11 members who did not have service reported.

Service	Police and Fire							<u>Total</u>
	<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 annual benefit	\$ 5,580	\$ 5,627	\$ 5,610	\$ 5,227	\$ 6,210	\$ 6,633	\$ 6,383	\$ 6,186
Average monthly benefit	\$ 465	\$ 469	\$ 468	\$ 436	\$ 518	\$ 553	\$ 532	\$ 516
Annual Benefits	\$407,321	\$512,068	\$964,925	\$893,878	\$7,365,223	\$4,099,008	\$1,755,277	\$15,997,700
Number of retired members	73	91	172	171	1,186	618	275	2,586

* Includes 16 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, 2013					
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	1,697	80	1,586	0	31
501-1,000	243	25	123	63	32
1,001-1,500	3	0	2	0	1
1,501-2,000	1	0	0	1	0
Over 2,000	0	0	0	0	0
Total	1,944	105	1,711	64	64

Political Subdivision Employees

June 30, 2013					
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	1,137	54	1,076	0	7
501-1,000	199	53	84	34	28
1,001-1,500	4	0	3	0	1
1,501-2,000	4	1	0	2	1
Over 2,000	0	0	0	0	0
Total	1,344	108	1,163	36	37

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

Teachers

June 30, 2013					
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	3,394	328	3,029	1	36
501-1,000	874	177	303	157	237
1,001-1,500	80	10	33	12	25
1,501-2,000	42	9	0	33	0
Over 2,000	0	0	0	0	0
Total	4,390	524	3,365	203	298

Police and Fire

June 30, 2013					
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	1,490	409	1,057	13	11
501-1,000	1,069	121	246	684	18
1,001-1,500	23	2	1	13	7
1,501-2,000	4	0	0	4	0
Over 2,000	0	0	0	0	0
Total	2,586	532	1,304	714	36

SECTION G

METHODS & ASSUMPTIONS

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 24 years from the contribution effective date (Fiscal Year 2016).

Medical Subsidy

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

Under New Hampshire Statute, 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"). Under IRS Regulations, 401(h) sub-trust contributions are limited by 25% of the total contributions to the plan (other than contributions to fund past service credits).

Valuation Methods

Actuarial Value of Assets - The Actuarial Value of Assets recognizes assumed investment return fully each year. Differences between actual return on the Market Value of assets and assumed return on the Actuarial Value of Assets are phased-in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Actuarial 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. Actuarial Value is limited to a 20% corridor around the Market Value.

The actuarial value of assets was allocated to the pension and medical subsidy plans based on the market value of those plans. The actuarial value of assets was then further allocated to each fund (either pension or medical subsidy) based on the market value of those funds.

For purposes of determining the medical subsidy solvency rates, the Market Value of assets was used for all group funds due to the short time horizon before these closed group funds are expected to become pay-as-you-go.

Development of Amortization Payment

The employer contribution rates determined by this 2013 valuation are for the 2016-17 biennium. The unfunded actuarial accrued liability (UAAL) was determined using the Actuarial 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 24-year period beginning on July 1, 2015. 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 determined by the June 30, 2011 valuation effective from July 1, 2013 to June 30, 2015 would be contributed to the net pension assets.

Valuation Assumptions

The actuarial assumptions used in the valuation are shown in this section. All actuarial assumptions and the rationale for the assumptions are based on the July 1, 2005 to June 30, 2010 experience study.

Economic Assumptions

The investment return rate assumed in the valuations is 7.75% per year, compounded annually (net after investment expenses). *The investment return rate* assumed in the medical subsidy valuations is 3.75% per year, compounded annually (net after investment expenses) for purposes of computing accrued liabilities and other disclosures required by GASB Statement No. 43. However, for determining the solvency contribution rate for the medical subsidy account, the investment return rate assumption was 7.75% on the market value of assets.

The **Wage Inflation Rate** assumed in this valuation was 3.75% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic 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 3.0% 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 7.75% 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 – at 4.75%, with a 3.0% price inflation assumption.

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 – 3.75% per year.

Pay increase assumptions for individual active members are shown for sample ages on the following pages. Part of the assumption for each age is for merit and/or seniority increase, and the other 3.75% recognizes wage inflation, including price inflation, productivity increases, and other macroeconomic 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.

Salary Increase Assumptions For an Individual Member			
Service Index	Merit & Seniority	Base (Economy)	Increase Next Year
1	7.55%	3.75%	11.30%
2	5.25%	3.75%	9.00%
3	3.55%	3.75%	7.30%
4	2.25%	3.75%	6.00%
5	1.75%	3.75%	5.50%
6	1.55%	3.75%	5.30%
7	0.75%	3.75%	4.50%
8	0.75%	3.75%	4.50%
9	0.75%	3.75%	4.50%
10	0.75%	3.75%	4.50%
11	0.75%	3.75%	4.50%
12	0.75%	3.75%	4.50%
13	0.75%	3.75%	4.50%
14	0.75%	3.75%	4.50%
15	0.75%	3.75%	4.50%
16	0.75%	3.75%	4.50%
17	0.75%	3.75%	4.50%
18	0.75%	3.75%	4.50%
19	0.75%	3.75%	4.50%
20	0.75%	3.75%	4.50%
21	0.75%	3.75%	4.50%
22	0.75%	3.75%	4.50%
23	0.75%	3.75%	4.50%
24	0.75%	3.75%	4.50%
25	0.75%	3.75%	4.50%
Ref:	3 - -4.50%		

Valuation Assumptions

Employees
(Continued)

The standard mortality table for death after retirement is the RP 2000 mortality table, projected to 2020 using projection scale AA. The proposed healthy mortality tables include a margin of 15% for men and 17% for women for mortality improvements based on the July 1, 2005 to June 30, 2010 experience study.

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)			
	Men	Women	Men	Women		
35	0.070%	0.038%	47.16	49.23		
40	0.092%	0.052%	42.34	44.33		
45	0.116%	0.081%	37.54	39.46		
50	0.149%	0.119%	32.77	34.63		
55	0.247%	0.231%	28.04	29.88		
60	0.489%	0.457%	23.47	25.31		
65	0.961%	0.878%	19.17	21.02		
70	1.641%	1.515%	15.22	17.06		
75	2.854%	2.394%	11.58	13.47		
80	5.265%	3.987%	8.42	10.23		
Ref:	##	x	###	##	x	###

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

Disabled pension mortality was based on 80% of the PBGC Disabled Mortality tables for males. The probabilities of disabled mortality at sample attained ages were as follows:

Sample Ages	Probability of Occurrence Next Year Disabled Death	
	Men	Women
20	3.86%	3.86%
25	3.86%	3.86%
30	2.90%	2.90%
35	2.22%	2.22%
40	2.26%	2.26%
45	2.58%	2.58%
50	3.06%	3.06%
55	3.86%	3.86%
Ref	250	250
	0.80	0.80

Valuation Assumptions

Employees (Continued)

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					
	Men			Women		
20	0.00%			0.01%		
25	0.04%			0.02%		
30	0.04%			0.02%		
35	0.05%			0.03%		
40	0.08%			0.04%		
45	0.12%			0.06%		
50	0.18%			0.08%		
55	0.25%			0.13%		
Ref	##	x	1.00	92	x	0.40
	10			2		

Valuation Assumptions

Employees
(Continued)

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

For Members Hired Prior to July 1, 2011

Retirement Ages	% of Active Members Retiring Within Next Year					
	Male			Female		
	Normal	Early	Early Rule X	Normal	Early	Early Rule X
45			1.0%			1.0%
46			1.0%			1.0%
47			1.0%			1.5%
48			1.0%			1.5%
49			1.0%			1.0%
50		1.0%	1.5%		1.0%	2.0%
51		1.0%	3.0%		1.0%	2.5%
52		1.0%	3.0%		1.0%	2.0%
53		1.0%	4.0%		1.0%	3.5%
54		1.0%	4.5%		1.5%	5.5%
55		2.0%	8.0%		2.5%	10.0%
56		2.5%	10.0%		3.5%	6.0%
57		2.5%	11.0%		3.0%	13.0%
58		3.5%	11.0%		4.0%	15.0%
59		5.0%	18.0%		5.5%	15.0%
60	12.0%			12.0%		
61	12.0%			12.0%		
62	17.0%			15.0%		
63	16.0%			15.0%		
64	15.0%			15.0%		
65	15.0%			20.0%		
66	25.0%			20.0%		
67	20.0%			20.0%		
68	20.0%			16.0%		
69	20.0%			17.0%		
70	100.0%			100.0%		
Ref.	1930	1932	1934	1931	1933	1935

Valuation Assumptions

Employees (Continued)

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

For Members Hired On or After July 1, 2011

Retiremen	% of Active Members Retiring Within Next Year				
	Male		Female		
	Ages	Normal	Early	Normal	Early
60		12.0%		12.0%	
61		12.0%		12.0%	
62		17.0%		15.0%	
63		16.0%		15.0%	
64		15.0%		15.0%	
65	46.0%		45.0%		
66	46.0%		45.0%		
67	20.0%		20.0%		
68	20.0%		16.0%		
69	20.0%		17.0%		
70	100.0%		100.0%		

Valuation Assumptions

Employees (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
	0	30.00%	30.00%
	1	22.00%	22.00%
	2	16.00%	16.00%
	3	12.00%	12.00%
	4	8.00%	8.00%
25	5+	5.00%	8.00%
30		5.00%	8.00%
35		5.00%	5.60%
40		5.00%	5.60%
45		5.00%	5.60%
50		5.00%	4.40%
55		5.00%	4.00%
60		5.00%	4.00%
Ref.		142	256
		1.0	2.0
		36	36

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	0.02%	0.00%
25	0.02%	0.01%
30	0.02%	0.02%
35	0.03%	0.02%
40	0.08%	0.05%
45	0.15%	0.09%
50	0.25%	0.19%
55	0.43%	0.35%
Ref	7	19
	1.30	0.75

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.

Salary Increase Assumptions For an Individual Member			
Service Index	Merit & Seniority	Base (Economy)	Increase Next Year
1	6.00%	3.75%	9.75%
2	4.00%	3.75%	7.75%
3	3.00%	3.75%	6.75%
4	2.50%	3.75%	6.25%
5	2.50%	3.75%	6.25%
6	2.20%	3.75%	5.95%
7	1.70%	3.75%	5.45%
8	1.40%	3.75%	5.15%
9	1.20%	3.75%	4.95%
10	1.20%	3.75%	4.95%
11	1.00%	3.75%	4.75%
12	1.00%	3.75%	4.75%
13	0.80%	3.75%	4.55%
14	0.80%	3.75%	4.55%
15	0.80%	3.75%	4.55%
16	0.80%	3.75%	4.55%
17	0.80%	3.75%	4.55%
18	0.80%	3.75%	4.55%
19	0.80%	3.75%	4.55%
20	0.80%	3.75%	4.55%
21	0.80%	3.75%	4.55%
22	0.80%	3.75%	4.55%
23	0.70%	3.75%	4.45%
24	0.70%	3.75%	4.45%
25	0.70%	3.75%	4.45%
Ref:	13 - -3.75%		

Valuation Assumptions

Teachers
(Continued)

The standard mortality table for death after retirement is the RP 2000 mortality table, projected to 2020. The proposed healthy mortality tables include a margin of 15% for men and 17% for women for mortality improvements based on the July 1, 2005 to June 30, 2010 experience study.

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)			
	Men	Women	Men	Women		
35	0.070%	0.038%	47.16	49.23		
40	0.092%	0.052%	42.34	44.33		
45	0.116%	0.081%	37.54	39.46		
50	0.149%	0.119%	32.77	34.63		
55	0.247%	0.231%	28.04	29.88		
60	0.489%	0.457%	23.47	25.31		
65	0.961%	0.878%	19.17	21.02		
70	1.641%	1.515%	15.22	17.06		
75	2.854%	2.394%	11.58	13.47		
80	5.265%	3.987%	8.42	10.23		
Ref:	##	x	###	##	x	###

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

Disabled pension mortality was based on 80% of the PBGC Disabled Mortality tables for males. The probabilities of disabled mortality at sample attained ages were as follows:

Sample Ages	Probability of Dying Next Year Disabled Death	
	Men	Women
20	3.86%	3.86%
25	3.86%	3.86%
30	2.90%	2.90%
35	2.22%	2.22%
40	2.26%	2.26%
45	2.58%	2.58%
50	3.06%	3.06%
55	3.86%	3.86%
Ref	250	250
	0.80	0.80

Valuation Assumptions

Teachers (Continued)

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 Dying Next Year					
	Death Before Retirement					
	Men		Women			
20	0.01%			0.01%		
25	0.01%			0.01%		
30	0.02%			0.01%		
35	0.03%			0.02%		
40	0.04%			0.02%		
45	0.05%			0.03%		
50	0.07%			0.05%		
55	0.11%			0.09%		
Ref	454	x	0.45	455	x	0.40

Valuation Assumptions

Teachers
(Continued)

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

For Members Hired Prior to July 1, 2011

Retirement Ages	% of Active Members Retiring Within Next Year					
	Male			Female		
	Normal	Early	Early Rule X	Normal	Early	Early Rule X
45			1.5%			1.0%
46			1.5%			1.0%
47			1.5%			1.0%
48			1.5%			1.0%
49			1.5%			1.0%
50		1.0%	1.5%		0.5%	1.0%
51		1.0%	1.5%		0.5%	1.0%
52		1.0%	1.5%		0.5%	1.0%
53		1.0%	1.5%		0.5%	1.0%
54		1.0%	3.0%		1.5%	3.0%
55		1.0%	9.0%		2.5%	8.0%
56		3.5%	15.0%		2.5%	13.0%
57		2.0%	16.0%		5.0%	13.0%
58		8.5%	20.0%		6.0%	20.0%
59		6.0%	20.0%		10.0%	20.0%
60	20.5%			17.0%		
61	22.0%			18.0%		
62	23.0%			22.0%		
63	24.0%			23.0%		
64	25.0%			24.0%		
65	26.0%			25.0%		
66	27.0%			30.0%		
67	28.0%			24.0%		
68	29.0%			28.0%		
69	30.0%			29.0%		
70	100.0%			100.0%		
Ref.	1936	1925	1927	1929	1926	1928

Valuation Assumptions

Teachers (Continued)

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

For Members Hired On or After July 1, 2011

Retirement Ages	% of Active Members Retiring Within Next Year			
	Male		Female	
	Normal	Early	Normal	Early
60		20.5%		17.0%
61		22.0%		18.0%
62		23.0%		22.0%
63		24.0%		23.0%
64		25.0%		24.0%
65	60.0%		60.0%	
66	50.0%		60.0%	
67	40.0%		24.0%	
68	30.0%		28.0%	
69	30.0%		29.0%	
70	100.0%		100.0%	

Valuation Assumptions

Teachers
(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
	0	35.00%	33.00%
	1	17.00%	18.00%
	2	14.00%	13.00%
	3	10.00%	11.00%
	4	8.00%	9.00%
25	5+	3.50%	4.50%
30		3.50%	4.50%
35		3.50%	4.50%
40		3.50%	4.50%
45		3.50%	4.50%
50		3.50%	4.50%
55		3.50%	4.50%
60		3.50%	4.50%
Ref.		61	48
		1.75	0.45
		184	676

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	0.006%	0.000%
25	0.006%	0.000%
30	0.007%	0.000%
35	0.008%	0.003%
40	0.017%	0.015%
45	0.035%	0.024%
50	0.082%	0.045%
55	0.181%	0.141%
Ref	2	66
	0.12	0.30

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.

Salary Increase Assumptions For an Individual Member			
Service Index	Merit & Seniority	Base (Economy)	Increase Next Year
1	20.40%	3.75%	24.15%
2	10.40%	3.75%	14.15%
3	7.90%	3.75%	11.65%
4	5.40%	3.75%	9.15%
5	2.90%	3.75%	6.65%
6	2.90%	3.75%	6.65%
7	1.20%	3.75%	4.95%
8	0.90%	3.75%	4.65%
9	0.70%	3.75%	4.45%
10	0.70%	3.75%	4.45%
11	0.60%	3.75%	4.35%
12	0.60%	3.75%	4.35%
13	0.50%	3.75%	4.25%
14	0.50%	3.75%	4.25%
15	0.50%	3.75%	4.25%
16	0.50%	3.75%	4.25%
17	0.50%	3.75%	4.25%
18	0.50%	3.75%	4.25%
19	0.50%	3.75%	4.25%
20	0.50%	3.75%	4.25%
21	0.40%	3.75%	4.15%
22	0.40%	3.75%	4.15%
23	0.40%	3.75%	4.15%
24	0.40%	3.75%	4.15%
25	0.40%	3.75%	4.15%
Ref:	15 - -4.15%		

Valuation Assumptions

Police
(Continued)

The standard mortality table for death after retirement is the RP 2000 mortality table, projected to 2020. The proposed healthy mortality tables include a margin of 15% for men and 17% for women for mortality improvements based on the July 1, 2005 to June 30, 2010 experience study.

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
35	0.070%	0.038%	47.16	49.23
40	0.092%	0.052%	42.34	44.33
45	0.116%	0.081%	37.54	39.46
50	0.149%	0.119%	32.77	34.63
55	0.247%	0.231%	28.04	29.88
60	0.489%	0.457%	23.47	25.31
65	0.961%	0.878%	19.17	21.02
70	1.641%	1.515%	15.22	17.06
75	2.854%	2.394%	11.58	13.47
80	5.265%	3.987%	8.42	10.23

Ref: ## x ### ## x ###

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

Disabled pension mortality was based on 80% of the PBGC Disabled Mortality tables for males. The probabilities of disabled mortality at sample attained ages were as follows:

Sample Ages	Probability of Dying Next Year Disabled Death	
	Men	Women
20	3.86%	3.86%
25	3.86%	3.86%
30	2.90%	2.90%
35	2.22%	2.22%
40	2.26%	2.26%
45	2.58%	2.58%
50	3.06%	3.06%
55	3.86%	3.86%
Ref	250	250
	0.80	0.80

Valuation Assumptions

Police (Continued)

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											
	Men					Women						
	Ordinary		Duty		Ordinary		Duty					
20	0.009%		0.009%		0.005%		0.005%					
25	0.012%		0.012%		0.006%		0.006%					
30	0.015%		0.015%		0.008%		0.008%					
35	0.026%		0.026%		0.014%		0.014%					
40	0.034%		0.034%		0.020%		0.020%					
45	0.044%		0.044%		0.031%		0.031%					
50	0.056%		0.056%		0.045%		0.045%					
55	0.093%		0.093%		0.087%		0.087%					
Ref	##	x	#	##	x	#	##	x	#	##	x	0
	0.375		0.375		0.375		0.375		0.375			

Valuation Assumptions

Police
(Continued)

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

(Applying to Eligible Members)

For Members Hired Prior to July 1, 2011 Who Have Vested Status as of January 1, 2012		For Members Hired on or After July 1, 2011 and for Members Hired Prior to July 1, 2011 Who Have Non-Vested Status as of January 1, 2012				
Retirement Ages	% of Active Members Retiring Within Next Year	Age 46 with 21 years	Age 47 with 22 years	Age 48 with 23 years	Age 49 with 24 years	Age 50 with 25 years
45	25%					
46	25%	28%				
47	25%	28%	35%			
48	25%	28%	35%	35%		
49	25%	28%	30%	35%	40%	
50	25%	28%	30%	35%	40%	50%
51	25%	28%	30%	35%	40%	50%
52	25%	28%	30%	35%	40%	50%
53	30%	30%	30%	35%	35%	35%
54	30%	30%	30%	35%	35%	35%
55	30%	30%	30%	30%	35%	35%
56	25%	25%	25%	25%	25%	25%
57	25%	25%	25%	25%	25%	25%
58	30%	30%	30%	30%	30%	30%
59	25%	25%	25%	25%	25%	25%
60	25%	25%	25%	25%	25%	25%
61	20%	20%	20%	20%	20%	20%
62	20%	20%	20%	20%	20%	20%
63	25%	25%	25%	25%	25%	25%
64	25%	25%	25%	25%	25%	25%
65	25%	25%	25%	25%	25%	25%
66	100%	100%	100%	100%	100%	100%

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
	0	30.00%	40.00%
	1	15.00%	17.00%
	2	9.00%	14.00%
	3	6.00%	11.00%
	4	4.00%	9.00%
25	5+	4.00%	4.00%
30		4.00%	4.00%
35		4.00%	4.00%
40		4.00%	4.00%
45		4.00%	4.00%
50		4.00%	4.00%
55		4.00%	4.00%
60		4.00%	4.00%
Ref.		61	61
		2.0	2.0
		7	233

Rates of disability among active members.

Sample Ages	% of Active Members Becoming Disabled within Next Year	
	Ordinary	Accidental
20	0.04%	0.02%
25	0.04%	0.02%
30	0.04%	0.02%
35	0.08%	0.05%
40	0.18%	0.12%
45	0.32%	0.21%
50	0.50%	0.34%
55	0.75%	0.50%
Ref	35	35
	0.45	0.30

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.

Salary Increase Assumptions			
For an Individual Member			
Service Index	Merit & Seniority	Base (Economy)	Increase Next Year
1	20.80%	3.75%	24.55%
2	10.80%	3.75%	14.55%
3	8.30%	3.75%	12.05%
4	5.80%	3.75%	9.55%
5	3.30%	3.75%	7.05%
6	3.30%	3.75%	7.05%
7	1.60%	3.75%	5.35%
8	1.30%	3.75%	5.05%
9	1.10%	3.75%	4.85%
10	1.10%	3.75%	4.85%
11	1.00%	3.75%	4.75%
12	1.00%	3.75%	4.75%
13	0.90%	3.75%	4.65%
14	0.90%	3.75%	4.65%
15	0.90%	3.75%	4.65%
16	0.90%	3.75%	4.65%
17	0.90%	3.75%	4.65%
18	0.90%	3.75%	4.65%
19	0.90%	3.75%	4.65%
20	0.90%	3.75%	4.65%
21	0.80%	3.75%	4.55%
22	0.80%	3.75%	4.55%
23	0.80%	3.75%	4.55%
24	0.80%	3.75%	4.55%
25	0.80%	3.75%	4.55%
Ref:	15 - -4.55%		

Valuation Assumptions

Fire
(Continued)

The standard mortality table for death after retirement is the RP 2000 mortality table, projected to 2020. The proposed healthy mortality tables include a margin of 15% for men and 17% for women for mortality improvements based on the July 1, 2005 to June 30, 2010 experience study.

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)			
	Men	Women	Men	Women		
35	0.070%	0.038%	47.16	49.23		
40	0.092%	0.052%	42.34	44.33		
45	0.116%	0.081%	37.54	39.46		
50	0.149%	0.119%	32.77	34.63		
55	0.247%	0.231%	28.04	29.88		
60	0.489%	0.457%	23.47	25.31		
65	0.961%	0.878%	19.17	21.02		
70	1.641%	1.515%	15.22	17.06		
75	2.854%	2.394%	11.58	13.47		
80	5.265%	3.987%	8.42	10.23		
Ref:	##	x	###	##	x	###

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

Disabled pension mortality was based on 80% of the PBGC Disabled Mortality tables for males. The probabilities of disabled mortality at sample attained ages were as follows:

Sample Ages	Probability of Dying Next Year Disabled Death	
	Men	Women
20	3.86%	3.86%
25	3.86%	3.86%
30	2.90%	2.90%
35	2.22%	2.22%
40	2.26%	2.26%
45	2.58%	2.58%
50	3.06%	3.06%
55	3.86%	3.86%
Ref	250	250
	0.80	0.80

Valuation Assumptions

Fire (Continued)

Disabled pension mortality was based on 80% of the 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											
	Men						Women					
	Ordinary		Duty		Ordinary		Duty		Ordinary		Duty	
20	0.01%		0.01%		0.00%		0.00%		0.00%		0.00%	
25	0.01%		0.01%		0.00%		0.00%		0.00%		0.00%	
30	0.01%		0.01%		0.01%		0.01%		0.01%		0.01%	
35	0.02%		0.02%		0.01%		0.01%		0.01%		0.01%	
40	0.02%		0.02%		0.01%		0.01%		0.01%		0.01%	
45	0.03%		0.03%		0.02%		0.02%		0.02%		0.02%	
50	0.04%		0.04%		0.03%		0.03%		0.03%		0.03%	
55	0.06%		0.06%		0.06%		0.06%		0.06%		0.06%	
Ref	##	x	0.25	##	x	0.25	##	x	0.25	##	x	0.25

Valuation Assumptions

Fire
(Continued)

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

(Applying to Eligible Members)

For Members Hired Prior to July 1, 2011 Who Have Vested Status as of January 1, 2012		For Members Hired on or After July 1, 2011 and for Members Hired Prior to July 1, 2011 Who Have Non-Vested Status as of January 1, 2012				
Retirement Ages	% of Active Members Retiring Within Next Year	Age 46 with 21 years	Age 47 with 22 years	Age 48 with 23 years	Age 49 with 24 years	Age 50 with 25 years
45	15%					
46	12%	15%				
47	12%	15%	17%			
48	12%	15%	17%	21%		
49	12%	15%	17%	21%	25%	
50	15%	15%	18%	21%	25%	32%
51	15%	15%	18%	21%	25%	32%
52	15%	15%	18%	21%	25%	32%
53	25%	25%	25%	25%	25%	25%
54	20%	20%	20%	20%	20%	20%
55	30%	30%	30%	30%	30%	30%
56	30%	30%	30%	30%	30%	30%
57	25%	25%	25%	25%	25%	25%
58	25%	25%	25%	25%	25%	25%
59	25%	25%	25%	25%	25%	25%
60	25%	25%	25%	25%	25%	25%
61	40%	40%	40%	40%	40%	40%
62	30%	30%	30%	30%	30%	30%
63	30%	30%	30%	30%	30%	30%
64	30%	30%	30%	30%	30%	30%
65	100%	100%	100%	100%	100%	100%

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
	0	8.00%	8.00%
	1	6.00%	6.00%
	2	4.50%	4.50%
	3	3.00%	3.00%
	4	2.00%	2.00%
25	5 & Over	1.50%	1.50%
30		1.50%	1.50%
35		1.50%	1.50%
40		1.50%	1.50%
45		1.50%	1.50%
50		1.50%	1.50%
55		1.50%	1.50%
60		1.50%	1.50%
Ref.		151	151
		1.5	1.5
		13	13

Rates of disability among active members.

Sample Ages	% of Active Members Becoming Disabled within Next Year	
	Ordinary	Accidental
20	0.04%	0.02%
25	0.04%	0.02%
30	0.05%	0.02%
35	0.06%	0.02%
40	0.11%	0.08%
45	0.23%	0.08%
50	0.54%	0.33%
55	1.21%	0.33%
Ref	2	28
	0.80	0.30

Miscellaneous and Technical Assumptions

<i>Administrative & Investment Expenses</i>	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, 2013 valuation.
<i>Benefit Service</i>	Exact Fractional service is used to determine the amount of benefit payable.
<i>COLA</i>	None assumed.
<i>Decrement Operation</i>	Disability and withdrawal do not operate during normal retirement eligibility.
<i>Decrement Timing</i>	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.
<i>Eligibility Testing</i>	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.
<i>Forfeitures</i>	It is assumed that 25% of members who quit before retirement with 10-15 years of service will elect to refund and forfeit their pension.
<i>Incidence of Contributions</i>	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.
<i>Liability Adjustments</i>	Normal, early and vesting retirement liabilities are increased by 9.0%, 7.0%, 12.0% and 12.0% for Employees, Teachers, Police and Fire respectively to account end of career pay increases. Members hired after July 1, 2011 or who have non-vested status as of January 1, 2012 are assumed to have no adjustment for end of career payments.
<i>Marriage Assumption</i>	Group I: 70% of males and 70% 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.

Normal Form of Benefit

This valuation assumes that members will elect the normal form of payment. Alternate forms of payment are available and are actuarially adjusted based on the valuation interest and mortality.

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.

Pay Increase Timing

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.

Service Credit Accruals

It is assumed that members accrue one year of service credit per year.

Split Benefits

Active members with service in more than one plan are valued as if all service accrued is in their current plan and do not value split benefits until the member retires.

Data Adjustments

For the June 30, 2013 valuation, new active member pays were annualized.

The NHRS underwent a thorough review of the medical subsidy data. We used the data as submitted without further audit and we assumed that members would commence benefits at their earliest opportunity.

Medical Subsidy

The solvency rates for the medical subsidy benefits were determined to provide an estimated margin of 20% of the benefits by June 30, 2016.

SECTION H
PLAN PROVISIONS

Plan Provisions – Group I

<i>Statute</i>	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, 2011.
<i>Effective Date</i>	July 1, 1967
<i>Plan Year</i>	July 1 through June 30
<i>Type of Plan</i>	Qualified, governmental defined benefit retirement plan; it is a single plan for financial reporting purposes.
<i>Eligibility Requirements</i>	Any employee or teacher becomes a Group I member as a condition of employment. Any employee appointed to an unclassified position with no fixed term on or after July 1, 2011 will also become a member of the retirement system as a condition of employment. Membership is optional for elected officials, officials appointed for fixed terms, unclassified state employees with no fixed term prior to July 1, 2011 or employees of the general court.
<i>Creditable Service</i>	Service measured from date of employment to date of retirement or prior termination plus service credited under one or more of the predecessor systems.
<i>Earnable Compensation</i>	<p>For members who have attained vested status prior to January 1, 2012 the full base rate of compensation paid, as determined by the employer, 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.</p> <p>For active members who begin service on or after July 1, 2011 or who are not in vested status on and after January 1, 2012 – Full base rate of compensation paid, as determined by the employer, plus compensation over base. Compensation over base pay shall include any overtime pay, annual longevity pay, cost of living bonus, additional pay for extracurricular and instructional activities, and any military differential pay, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax, but excluding other compensation except supplemental pay paid by the employer while the member is receiving workers' compensation and teacher development pay that is not part of the contracted annual salary. Compensation for extra and special duty, as determined by the employer, shall be eliminated for those hired after July 1, 2011 and shall be included but limited during the highest 5 years of creditable service as provided in paragraph RSA 100-A:1 XVIII as amended.</p>

Plan Provisions – Group I

Earnable compensation shall not include incentives to encourage members to retire, severance pay, or end-of-career longevity payments and pay for unused sick or vacation time. 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. The new definition of earnable compensation is effective immediately for those hired on or after July 1, 2011 and effective January 1, 2012 for those hired before July 1, 2011 who are not vested as of January 1, 2012.

Average Final Compensation (AFC)

For members who have attained vested status prior to January 1, 2012, the average annual earnable compensation during the highest 3 years of creditable service.

For active members who commenced service on or after July 1, 2011 or who have non-vested status on or after January 1, 2012 – Average annual earnable compensation during the highest 5 years of creditable service.

Service Retirement

Eligibility: Age 60 years (Age 65 for members commencing service on or after July 1, 2011).

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 1/60th of AFC times creditable service (1/66th of AFC times creditable service for members commencing service on or after July 1, 2011).

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

Normal Form: Straight life annuity.

Early Retirement

Eligibility: For members who commenced service prior to July 1, 2011, completion of 20 years of creditable service and age plus service at least 70, or attainment of age 50. (Age 60 with 30 years of creditable service for members commencing service on or after July 1, 2011.)

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

For members commencing service on or after July 1, 2011, normal retirement benefit is reduced 1/4 of 1% for each month prior to age 65.

Plan Provisions – Group I

Ordinary Disability

Eligibility: 10 or more years of creditable service.

Benefit: Ordinary disability retirement benefit if at least age 60, a member annuity plus state annuity as follows: Prior to age 65 the member and state annuity shall be equal to $1/60$ of the member's AFC at the time of his ordinary disability times the number of years of creditable service. After age 65, the member and state annuity shall be equal to $1/66$ of the member's AFC at the time of his ordinary disability times the number of years of creditable service. Regardless of age at disability, the ordinary disability allowance shall not be less than 25% of the AFC.

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: Accidental disability retirement benefit if at least age 60, a member annuity plus state annuity as follows: Prior to age 65 the member and state annuity shall be equal to $1/60$ of the member's AFC at the time of his accidental disability retirement times the number of years of creditable service. After age 65, the member and state annuity shall be equal to $1/66$ of the member's AFC at the time of his accidental disability retirement times the number of years of creditable service, not less than 50% of AFC.

Under age 60, a member annuity plus state annuity that shall be equal to 50% times AFC.

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.

Plan Provisions – Group I

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 (age 60 for members hired after July 1, 201) or the member may apply for a refund of accumulated contributions.

Maximum Benefit

For members who were hired prior to July 1, 2009, a member's retirement benefit shall not exceed 100% of the member's highest year of earnable compensation. For members who commenced service on or after July 1, 2009 or are non-vested as of January 1, 2012, a member's retirement benefit shall not exceed the lesser of 85% of the member's highest average final compensation or \$120,000.

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 commencing 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 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

7.0% of earnable compensation. Interest on member contributions shall be 2 percentage points less than either the most recent board of trustees approved assumed rate of return determined under RSA 100-A:16, II(h) or the actual rate of return, whichever is lower.

Employer Contributions

As prescribed in RSA 100-A:16.

Temporary Supplemental Allowances

None.

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

<i>Statute</i>	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, 2011.
<i>Effective Date</i>	July 1, 1967
<i>Plan Year</i>	July 1 through June 30
<i>Type of Plan</i>	Qualified, governmental defined benefit retirement plan; it is a single plan for financial reporting purposes.
<i>Eligibility Requirements</i>	Any permanent policeman or permanent fireman becomes a Group II member as a condition of employment.
<i>Creditable Service</i>	Service measured from date of employment to date of retirement or prior termination plus service credited under one or more of the predecessor systems.
<i>Earnable Compensation</i>	<p>For members who have attained vested status prior to January 1, 2012 the, full base rate of compensation paid, as determined by the employer, 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.</p> <p>For active members who begin service on or after July 1, 2011 or who are not in vested status on and after January 1, 2012 – Full base rate of compensation paid, as determined by the employer, plus compensation over base pay. Compensation over base pay shall include any overtime pay, holiday pay, cost of living bonus, additional pay for extracurricular and instructional activities, compensation for extra or special duty and any military differential pay, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax, but excluding other compensation except supplemental pay paid by the employer while the member is receiving workers' compensation and teacher development pay that is not part of the contracted annual salary. Compensation for extra and special duty, as determined by the employer, shall be eliminated for those hired after July 1, 2011 and shall be included but limited during the highest 5 years of creditable service as provided in paragraph RSA 100-A:1 XVIII as amended for those employed prior to July 1, 2011.</p>

Plan Provisions – Group II

Earnable compensation shall not include incentives to encourage members to retire, severance pay, or end-of-career longevity payments and pay for unused sick or vacation time. 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. The new definition of earnable compensation is effective immediately for those hired on or after July 1, 2011 and effective January 1, 2012 for those hired before July 1, 2011 who are not vested as of January 1, 2012.

Average Final Compensation (AFC)

For members that are in vested status prior to January 1, 2012, average annual earnable compensation during the highest 3 years of creditable service.

For active members who commenced service on or after July 1, 2011 or who have non-vested status on or after January 1, 2012 – Average annual earnable compensation during the highest 5 years of creditable service.

Service Retirement

Eligibility: For those members that are in vested status as of January 1, 2012, age 45 and 20 years of creditable service or age 60 (age 52.5 with 25 years of creditable service or age 60 for members commencing service on or after July 1, 2011).

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

For members who are in vested status as of January 1, 2012, the state annuity, together with the member annuity, shall be equal to 2-1/2% of AFC times creditable service up to 40 years (2% of AFC times creditable service up to 42.5 years for members commencing service on or after July 1, 2011). However, a member who commenced service on or after July 1, 2011 shall not receive a service retirement allowance until attaining the age of 52.5, but may receive a reduced allowance after age 50 if the member has at least 25 years of creditable service where the allowance shall be reduced, for each month by which the benefit commencement date precedes the month after which the member attains 52.5 years of age, by ¼ of 1%).

Plan Provisions – Group II

Members hired prior to July 1, 2011 who have non-vested status as of January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on January 1, 2012 according to the following table:

<i>Creditable Service on January 1, 2012</i>	<i>Minimum Years of Service</i>	<i>Minimum Age Attained</i>	<i>Annuity Multiplier</i>
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

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: Ordinary Disability Retirement Benefit. The disability retirement allowance shall consist of the following: A member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 ½ percent of his or her AFC at the time of ordinary disability retirement times the number of years of creditable service not in excess of 40.

For members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her AFC at the time of ordinary disability retirement times the number of years of creditable service not in excess of 42.5. Members hired prior to July 1, 2011, but not in vested status as of January 1, 2012 shall be as provided in the transition provisions in the table shown above in Service Retirement with the maximum number of years of creditable service not in excess of 40.5 years.

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

Plan Provisions – Group II

Accidental Disability

Eligibility: Permanently disabled in the performance of duty.

Benefit: Accidental Disability Retirement Benefit.

Members hired prior to July 1, 2011 who have vested status as of January 1, 2012 are eligible for an accidental disability benefit and shall receive a benefit equal to $\frac{2}{3}$ of AFC. If a member has more than $26\frac{2}{3}$ years of service, the member will receive a supplemental disability benefit equal to $2\frac{1}{2}\%$ of AFC times years of creditable service in excess of $26\frac{2}{3}$ years but not in excess of 40 years.

Members commencing service on or after July 1, 2011 are eligible for an accidental disability benefit and shall receive a benefit equal to $\frac{2}{3}$ of AFC. If a member has more than $33\frac{1}{3}$ years of service, the member will receive a supplemental disability benefit equal to 2% of AFC times years of creditable service in excess of $33\frac{1}{3}$ years but not in excess of 42.5 years.

Members hired prior to July 1, 2011 who have non-vested status as of January 1, 2012 are eligible for an accidental disability benefit and shall receive a benefit equal to $\frac{2}{3}$ of AFC. The calculation of the supplemental allowance shall be as provided in the transition provisions with the number of years for the supplement adjusted proportionally.

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.

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.

Plan Provisions – Group II

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 the age the member would have attained service or reduced early service retirement eligibility requirement, or age 60 or the member may apply for a refund of accumulated contributions.

Maximum Benefit

For members who were hired prior to July 1, 2009, a member's retirement benefit shall not exceed 100% of the member's highest year of earnable compensation. For members who commenced service on or after July 1, 2009 or are non-vested as of January 1, 2012, a member's retirement benefit shall not exceed the lesser of 85% of the member's highest average final compensation or \$120,000.

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

Fire members: 11.80% of earnable compensation.
Police members: 11.55% of earnable compensation.

Member contributions cease for members who are in vested status before January 1, 2012 with creditable service in excess of 40 years. Member contributions cease for all other Group II members with creditable service in excess of 42.5 years.

Interest on member contributions shall be 2 percentage points less than either the most recent board of trustees approved assumed rate of return determined under RSA 100-A:16, II(h) or the actual rate of return, whichever is lower.

Employer Contributions

As prescribed in RSA 100-A:16.

Temporary Supplemental Allowances

None.

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

2013 Legislative Session

House Bill 2 in the 2011 legislative session changed various benefit provisions and member contribution rates for certain members of the New Hampshire Retirement System. Recent legal activity indicates that the potential exists for reversal of some of the changes implemented by HB 2. At the time of issuance of this report the final outcome was not known.

Results provided below reflect the reversal of certain HB 2 provisions. Based on discussions with NHRS staff, the scenario evaluated was to reset member contributions for vested members before January 1, 2012 back to original levels for vested members. On a prospective basis, the impact on the 2016-17 employer rates is shown below.

Alternate Results based on Reversal House Bill 2 Changes

	Computed Employer Contribution Rates as a Percent of Payroll				
	State Members				
	Employees	Teachers	Police	Fire	Total*
Pension	11.87%		23.71%	26.93%	13.44%
Medical Subsidy	1.64%		3.84%	3.84%	1.93%
Total	13.51%		27.55%	30.77%	15.36%
Increase over Regular Valuation	1.01%		1.17%	1.61%	1.03%

	Computed Employer Contribution Rates as a Percent of Payroll				
	Political Subdivision Members				
	Employees	Teachers	Police	Fire	Total*
Pension	11.87%	13.87%	23.71%	26.93%	15.02%
Medical Subsidy	0.31%	2.95%	3.84%	3.84%	2.29%
Total	12.18%	16.82%	27.55%	30.77%	17.30%
Increase over Regular Valuation	1.01%	1.15%	1.17%	1.61%	1.14%

* The total NHRS employer rate is 15.76% of payroll and would increase by 1.11% of payroll to 16.87% of payroll in this scenario.

The actual outcome of litigation could of course differ from the scenario assumed in the above results. A different outcome would result in different employer contribution rates than those shown above.

History of Recent Changes in Plan Provisions

2012 Legislative Session

- (a) Modifies the calculation of Average Final Compensation (AFC) for members not vested prior to January 1, 2012 by changing the “compensation over base pay” factor used in the AFC formula from a dollar average to a percentage average.
- (b) Clarifies the date from which NHRS must begin calculating a 7-year average of Extra or Special Duty Pay for Group II (Police and Fire) members vested prior to January 1, 2012. This change excludes from the calculation any months prior to July 1, 2009, which is when ESDP began to be separately reported to NHRS.
- (c) Clarifies the number of years of creditable service Group II (Police and Fire) members in service prior to July 1, 2011, but not vested prior to January 1, 2012, must have in order to qualify for the supplemental disability benefit available to eligible Accidental Disability retirees.
- (d) Changes the annual effective date of changes to the member interest rate from a fiscal year to a calendar year.
- (e) Clarifies the definition of “compensation over base pay” for members not vested prior to January 1, 2012.
- (f) Clarifies that the maximum benefit limit for members hired before July 1, 2009, is 100 percent of Earnable Compensation and the maximum benefit limit for members hired after that date, and not vested by January 1, 2012, is the lesser of 85 percent of AFC or \$120,000 per year.
- (g) Modifies the definition of “part-time” for NHRS retirees employed by NHRS-participating employers.
- (h) Changes the date by which NHRS Trustees must approve the retirement system’s Comprehensive Annual Financial Report from December 1 to December 31 of each year.
- (i) RSA 100-A:53, II; RSA 100-A:53-e, II; RSA 100-A:16, II(h); and RSA 100-A:16, II(j), relative to the Special Account, are repealed.
- (j) RSA 100-A:16, III-a, commonly known as the employer “spiking” assessment, is repealed.

History of Recent Changes in Plan Provisions

2011 Legislative Session:

Legislation enacted in the 2011 legislative session is summarized below:

House Bill No. 2 as Amended by 2011-2513-CofC:

- (a) Change the definition of Earnable Compensation for active members who begin service on or after July 1, 2011 or who are not in vested status on and after January 1, 2012.
- (b) For active members who commenced service on or after July 1, 2011 or who have non-vested status on or after January 1, 2012 AFC equals the average annual earnable compensation during the highest 5 years of creditable service.
- (c) For members who commenced service on or after July 1, 2009 or are non-vested as of January 1, 2012, a member's retirement benefit shall not exceed the lesser of 85% of the member's highest average final compensation or \$120,000.
- (d) Group I members commencing service on or after July 1, 2011 are eligible to retire at age 65 and are eligible for a reduced annuity at age 60 with 30 years of creditable service. Prior to age 65, the state annuity, together with the member annuity, shall be equal to 1/66th of AFC times creditable service reduced for each month prior to the month after the member attains age 65 by 1/4 of 1%. After age 65, the state annuity, together with the member annuity, shall be equal to 1/66th of AFC times creditable service, reduced for each month prior to the month after the member attains age 65 by 1/4 of 1%.
- (e) Group II members commencing service on or after July 1, 2011 are eligible to retire at age 52.5 with 25 years of creditable service or age 60. The benefit shall be equal to 2% of AFC times creditable service up to 42.5 years. However, a member who commenced service on or after July 1, 2011 shall not receive a service retirement allowance until attaining the age of 52.5, but may receive a reduced allowance after age 50 if the member has at least 25 years of creditable service where the allowance shall be reduced, for each month by which the benefit commencement date precedes the month after which the member attains 52.5 years of age, by 1/4 of 1%.
- (f) Group II members hired prior to July 1, 2011 who have non-vested status as of January 1, 2012 shall be subject to transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on January 1, 2012.
- (g) Group II members commencing service on or after July 1, 2011 are eligible for an accidental disability benefit and shall receive a benefit equal to 2/3 of AFC. If a member has more than 33-1/3 years of service, the member will receive a supplemental disability benefit equal to 2% of AFC times years of creditable service in excess of 33-1/3 years but not in excess of 42.5 years.

History of Recent Changes in Plan Provisions

(h) *Member Contributions*

Group I members: 7.0% of earnable compensation.

Group II fire members: 11.80% of earnable compensation.

Group II police members: 11.55% of earnable compensation.

Group II member contributions cease for members who are in vested status before January 1, 2012 with creditable service in excess of 40 years. Member contributions cease for all other Group II members with creditable service in excess of 42.5 years.

(i) *Medical Subsidy* – After July 1, 2007 and including each July 1, thereafter, the rate payable shall not be increased.

(j) Interest on the individual accounts of members in the member annuity savings fund shall be credited interest at 2 percentage points less than either the most recent board of trustees approved assumed rate of return determined under RSA 100-A:16, II(h) or the actual rate of return, whichever is lower for the immediately preceding fiscal year as reported in the CAFR as approved and accepted by the board of trustees by December 1, of each year, provided the rate shall not be less than zero.

(k) Any retired member who is receiving a medical subsidy under RSA 100-A:52 or RSA 100-A:52-a shall be entitled to receive an additional supplemental allowance. The amount of the additional temporary supplemental allowance shall be \$500 for retirees taking a one-person medical benefit and \$1,000 for retirees taking a 2-person medical benefit, paid from the respective component of the reserve for TSAs. The supplemental allowance shall apply only for the fiscal years beginning July 1, 2008 up to and including the fiscal year beginning July 1, 2012.

(l) Transfer the balance in each special account component (Employees, Teachers, Police and Fire) to the corresponding components of the State annuity accumulation fund except for funds necessary to comply with RSA 100-A:41-d, III as amended.

History of Recent Changes in Plan Provisions

2010 Legislative Session:

Legislation enacted in the 2010 legislative session is summarized below:

- (a) **Special Session House Bill 1: COLA, TSA approved.** Provides cost-of-living adjustments (COLAs) and temporary supplemental allowances (TSAs) for eligible retirees or beneficiaries;
- (b) **Senate Bill 504: “Spiking” provision deferred.** Extends the effective date of the 2008 legislation creating the so-called “spiking” provision (125% assessment) from July 1, 2010 to July 1, 2011. A study commission continues to evaluate proposals for the assessment methodology;
- (c) **House Bill 1668: State Medical Subsidy insurance for Group II members** [RSA 21-130]. Requires Group II (Police and Fire) members whose service with a state agency or department began on or after July 1, 2010, complete at least 20 years of creditable service with the state in order to qualify for post-retirement state medical subsidy insurance coverage.

Medical Plan Provisions

Subsidy benefits as of July 1, 2013 and thereafter are as follows:

	Monthly Amounts	
	Pre-65	Post-65
Single	\$375.56	\$236.84
Couple	\$751.12	\$473.68

The above amounts will not increase.

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 are eligible to retire as of July 1, 2008, on Vested Deferred retirement 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 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 are eligible to retire as of July 1, 2008 and who actually retire on or before July 1, 2009, 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.

Medical Plan Provisions

- 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 the dependent child attains age 18 or age 23, if attending school on a full-time basis.
- 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.

SECTION I
GLOSSARY

Glossary

<i>Actuarial Accrued Liability (AAL)</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Present Value of Future Benefits (APVFB)</i>	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.
<i>Actuarial Valuation</i>	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).
<i>Actuarial Value of Assets</i>	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 annual required contribution (ARC).

Glossary

<i>Amortization Method</i>	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.
<i>Amortization Payment</i>	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<i>Amortization Period</i>	The period used in calculating the Amortization Payment.
<i>Annual Required Contribution (ARC)</i>	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.
<i>Closed Amortization Period</i>	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.
<i>Employer Normal Cost</i>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<i>Equivalent Single Amortization Period</i>	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.
<i>Experience Gain/Loss</i>	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

<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<i>GASB</i>	Governmental Accounting Standards Board.
<i>GASB No. 25 and GASB No. 27</i>	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.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Open Amortization Period</i>	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.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Solvency Rate</i>	The minimum contribution necessary to prevent insolvency (a fund balance less than \$0) during or after the biennium in which contributions are being calculated. If fund balances are projected to be less than \$0 prior to the beginning of the biennium (due to the lag between the valuation date and contribution certification), then the solvency rate is the minimum contribution necessary to bring the balance back to \$0 by the end of the biennium. After the fund balance reaches \$0, the solvency rate becomes the pay-as-you-go rate.
<i>Valuation Date</i>	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.