

NEW HAMPSHIRE RETIREMENT SYSTEM
ACTUARIAL VALUATION REPORT - FINAL
AS OF JUNE 30, 2014

April 30, 2015

Board of Trustees
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301-8507

Re: New Hampshire Retirement System Actuarial Valuation as of June 30, 2014

Dear Board Members:

The results of the June 30, 2014 Annual Actuarial Valuation of the New Hampshire Retirement System (NHRS) are presented in this report. The purposes of the valuation were:

- to measure the System's funding progress;
- to calculate estimated contribution rates based on plan experience since the date of the most recent valuation, noting that the actual contribution rates for Fiscal Year 2018 and Fiscal Year 2019 will be calculated following the completion of the Fiscal Year 2015 valuation, which will also take into consideration the Fiscal Year 2015 experience study; and
- to provide data schedules as of June 30, 2014 for the NHRS Consolidated Annual Financial Report.

We emphasize for the benefit of the Trustees that the estimated contribution rates included in this report demonstrate the impact of plan experience over the last Fiscal Year. However, while they illustrate the improvement of plan experience over the measurement period, they should not be relied upon as an indication of the actual employer contribution rates which will be set for Fiscal Year 2018 and Fiscal Year 2019. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 contribution rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

Calculations required for compliance with the Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 will be issued in separate reports.

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 purposes described above. 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 as of June 30, 2014. 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. The actuarial assumptions are established by the Board after consulting with the actuary under New Hampshire Statute RSA 100-A:14 IX. We believe that the assumptions and methods used in this report are reasonable and appropriate for the purposes 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, 2014. 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.

David T. Kausch, Heidi G. Barry and Judith A. Kermans are independent of the plan sponsors, 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.

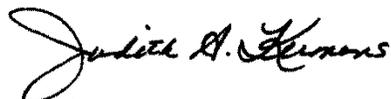
Respectfully submitted,



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



Heidi G. Barry, A.S.A., M.A.A.A.



Judith A. Kermans, E.A., F.C.A., M.A.A.A.

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SECTION A
INTRODUCTION

Highlights of June 30, 2014 Actuarial Valuation

Estimate of Employer Contribution Rates for the 2018/19 Biennium

	Estimated Employer Contribution Rates as a Percent of Payroll				
	State Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.34%		20.88%	23.38%	11.73%
Medical Subsidy	1.03%		3.91%	3.91%	1.40%
Total	11.37%		24.79%	27.29%	13.13%

	Estimated Employer Contribution Rates as a Percent of Payroll				
	Political Subdivision Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.34%	12.09%	20.88%	23.38%	13.12%
Medical Subsidy	0.28%	1.23%	3.91%	3.91%	1.37%
Total	10.62%	13.32%	24.79%	27.29%	14.49%

* The grand total contribution rates for NHRS (State and Political Subdivisions combined) are 12.80% of payroll for pension and 1.38% for the medical subsidy for a grand total of 14.18% 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.

Estimated contribution rates for pension and medical subsidy illustrate the improvement of plan experience over the measurement period. However, they should not be relied upon as an indication of the actual employer contribution rates which will be set for Fiscal Year 2018 and Fiscal Year 2019. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

The Pension Funded Ratio (Actuarial Value of Assets divided by the Actuarial Accrued Liability) for NHRS in total is 60.7%.

Changes to the System included in the June 30, 2014 Actuarial Valuation:

- 1) In total, plan experience between June 30, 2013 and June 30, 2014 was favorable for both the pension and the medical subsidy. The dollar weighted rate of return for the year ending June 30, 2014 was 17.23% on the market value of assets and 12.28% on the actuarial value of assets, resulting in a recognized asset gain of \$273 million (pension and medical subsidy combined). Total covered payroll increased by 0.25% versus the assumed increase of 3.75% resulting in pension liability gains. Between the 2013 and 2014 valuation, the pension funded ratio increased by 4.0% (56.7% to 60.7%). See Comment 1 on page 14.
- 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 market value of assets available to fund medical subsidy benefits increased from \$23.0 million to \$23.4 million. See Comment 2 on page 14.

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, 2014					
a. Actives	24,545	17,986	4,166	1,610	48,307
b. Retirees, Disabilities, and Beneficiaries	15,314	10,965	3,282	1,493	31,054
c. Vested Terminations	704	531	55	7	1,297
d. Total	40,563	29,482	7,503	3,110	80,658
e. Total Covered Annual Payroll	\$ 1,088,508,059	\$ 1,033,866,735	\$ 270,497,015	\$ 115,027,000	\$ 2,507,898,809
II. Long Range Pension Cost					
a. Actuarial Present Value of Projected Benefits	\$ 4,382,899,836	\$ 4,940,231,871	\$ 2,386,309,448	\$1,154,575,140	\$12,864,016,295
b. Actuarial Present Value of Future Normal Costs	691,068,134	661,178,862	299,463,216	167,132,217	1,818,842,429
c. Actuarial Accrued Liability (AAL): a. – b.	3,691,831,702	4,279,053,009	2,086,846,232	987,442,923	11,045,173,866
d. Actuarial Value of Assets	2,195,284,493	2,482,496,580	1,361,279,705	661,492,657	6,700,553,435
e. Unfunded Actuarial Accrued Liability (UAAL): c. – d.	1,496,547,209	1,796,556,429	725,566,527	325,950,266	4,344,620,431
f. Funded Status (d. / c.)	59.5%	58.0%	65.2%	67.0%	60.7%
III. Additional Information on Payroll					
State	\$ 497,855,151	\$ -	\$ 70,417,480	\$ 3,778,708	\$ 572,051,339
Political Subdivisions	590,652,908	1,033,866,735	200,079,535	111,248,292	1,935,847,470
Total	\$ 1,088,508,059	\$ 1,033,866,735	\$ 270,497,015	\$ 115,027,000	\$ 2,507,898,809

Executive Summary

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, 2014					
a. Actives	-	-	-	3,502	3,502
b. Retirees, Disabilities, and Beneficiaries	1,924	1,313	4,371	2,635	10,243
c. Vested Terminations	-	-	-	-	-
d. Total	1,924	1,313	4,371	6,137	13,745
e. Total NHRS Covered Annual Payroll	\$ 497,855,151	\$ 590,652,908	\$ 1,033,866,735	\$ 385,524,015	\$ 2,507,898,809
II. Long Range Post-Retirement Medical Subsidy Cost					
a. Actuarial Present Value of Projected Benefits	\$ 78,172,594	\$ 65,505,566	\$ 238,681,526	\$ 348,141,507	\$ 730,501,193
b. Actuarial Present Value of Future Normal Costs	-	-	-	16,397,777	16,397,777
c. Actuarial Accrued Liability (AAL): a. – b.	78,172,594	65,505,566	238,681,526	331,743,730	714,103,416
d. Valuation Assets	325,198	22,767,078	(11,247,536)	9,401,159	21,245,899
e. Unfunded Actuarial Accrued Liability (UAAL): c. – d.	77,847,396	42,738,488	249,929,062	322,342,571	692,857,517
f. Funded Status	0.4%	34.8%	(4.7%)	2.8%	3.0%

Executive Summary
Estimated Contribution Rates
State Members

Covered Group	Employees	Teachers	Police	Fire	Total
Current Cost					
Total Normal Cost (% of Covered Payroll)	9.06%		16.36%	18.22%	10.02%
UAAL Contribution (% of Payroll)	8.28%		16.07%	16.96%	9.30%
Total Pension Contribution (% of Payroll)	17.34%		32.43%	35.18%	19.32%
Fiscal Year 2018					
Member Contributions (% of Payroll)	7.00%		11.55%	11.80%	7.59%
Employer Pension Contribution (% of Payroll)	10.34%		20.88%	23.38%	11.73%
Employer Medical Subsidy Contribution (% of Payroll)	1.03%		3.91%	3.91%	1.40%
Total Contributions for Fiscal Year 2018					
1. Percent of Payroll	11.37%	N/A	24.79%	27.29%	13.13%
2. Estimated Dollar Amount	\$ 65,586,717	N/A	\$ 20,225,973	\$ 1,194,811	\$ 87,007,501
Fiscal Year 2019					
Member Contributions (% of Payroll)	7.00%		11.55%	11.80%	7.59%
Employer Pension Contribution (% of Payroll)	10.34%		20.88%	23.38%	11.73%
Employer Medical Subsidy Contribution (% of Payroll)	1.03%		3.91%	3.91%	1.40%
Total Contributions for Fiscal Year 2019					
1. Percent of Payroll	11.37%	N/A	24.79%	27.29%	13.13%
2. Estimated Dollar Amount	\$ 68,046,219	N/A	\$ 20,984,447	\$ 1,239,617	\$ 90,270,283

Estimated contribution rates for pension and medical subsidy illustrate the improvement of plan experience over the measurement period. However, they should not be relied upon as an indication of the actual employer contribution rates which will be set for Fiscal Year 2018 and Fiscal Year 2019. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

Executive Summary

Estimated Contribution Rates (Concluded)

Political Subdivison Members

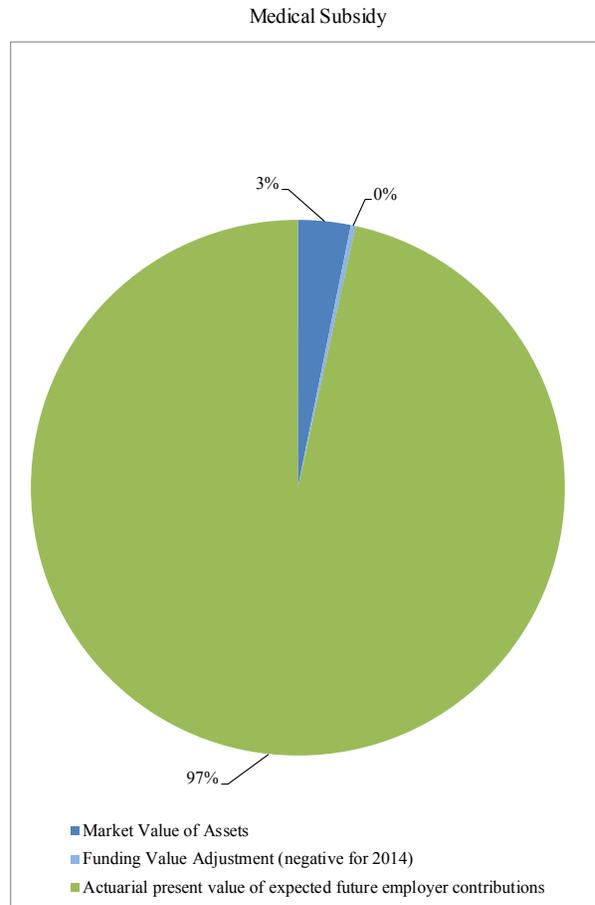
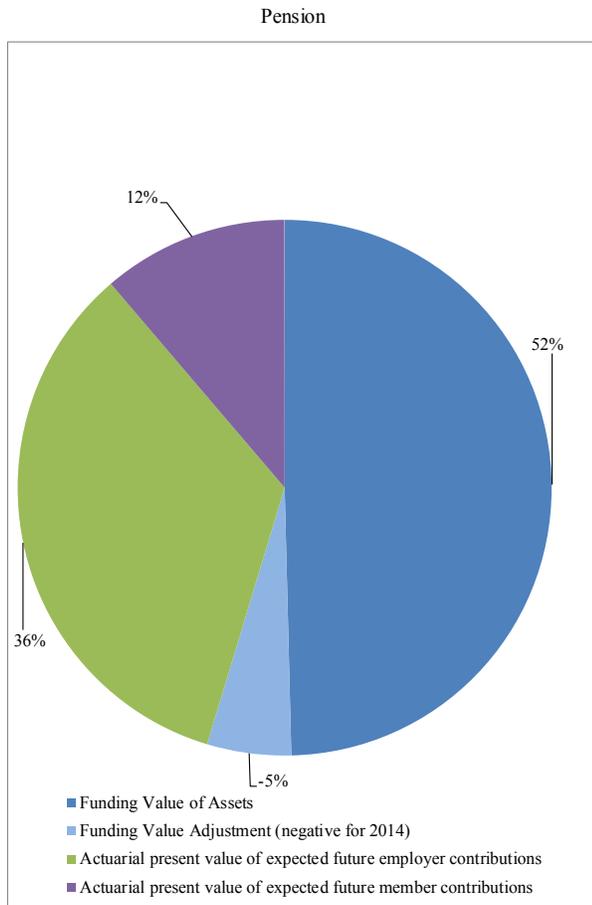
Covered Group	Employees	Teachers	Police	Fire	Total
Current Cost					
Total Normal Cost (% of Covered Payroll)	9.06%	8.60%	16.36%	18.22%	10.10%
UAAL Contribution (% of Payroll)	8.28%	10.49%	16.07%	16.96%	10.77%
Total Pension Contribution (% of Payroll)	17.34%	19.09%	32.43%	35.18%	20.87%
Fiscal Year 2018					
Member Contributions (% of Payroll)	7.00%	7.00%	11.55%	11.80%	7.75%
Employer Pension Contribution (% of Payroll)	10.34%	12.09%	20.88%	23.38%	13.12%
Employer Medical Subsidy Contribution (% of Payroll)	0.28%	1.23%	3.91%	3.91%	1.37%
Total Contributions for Fiscal Year					
1. Percent of Payroll	10.62%	13.32%	24.79%	27.29%	14.49%
2. Estimated Dollar Amount	\$ 72,679,057	\$ 159,558,964	\$ 57,468,732	\$ 35,176,231	\$ 324,882,984
Fiscal Year 2019					
Member Contributions (% of Payroll)	7.00%	7.00%	11.55%	11.80%	7.75%
Employer Pension Contribution (% of Payroll)	10.34%	12.09%	20.88%	23.38%	13.12%
Employer Medical Subsidy Contribution (% of Payroll)	0.28%	1.23%	3.91%	3.91%	1.37%
Total Contributions for Fiscal Year					
1. Percent of Payroll	10.62%	13.32%	24.79%	27.29%	14.49%
2. Estimated Dollar Amount	\$ 75,404,522	\$ 165,542,425	\$ 59,623,809	\$ 36,495,340	\$ 337,066,096

Total NHRS Members

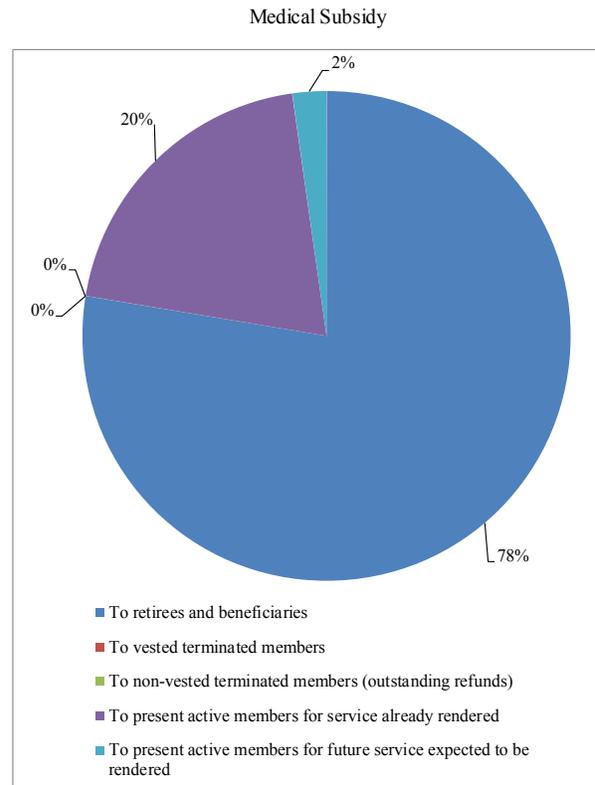
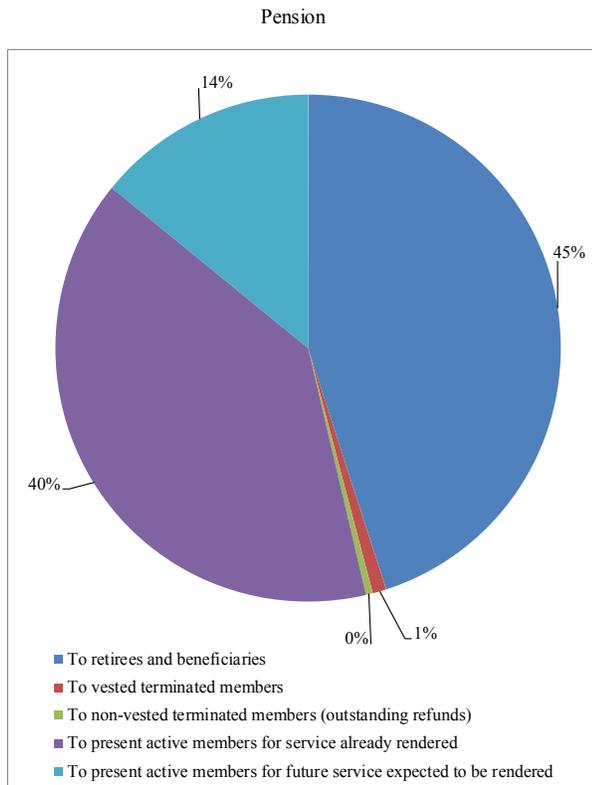
Covered Group	Employees	Teachers	Police	Fire	Total
Current Cost					
Fiscal Year 2018					
Estimated Dollar Amount	\$ 138,265,774	\$ 159,558,964	\$ 77,694,705	\$ 36,371,042	\$ 411,890,485
Fiscal Year 2019					
Estimated Dollar Amount	\$ 143,450,741	\$ 165,542,425	\$ 80,608,256	\$ 37,734,957	\$ 427,336,379

Estimated contribution rates for pension and medical subsidy illustrate the improvement of plan experience over the measurement period. However, they should not be relied upon as an indication of the actual employer contribution rates which will be set for Fiscal Year 2018 and Fiscal Year 2019. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

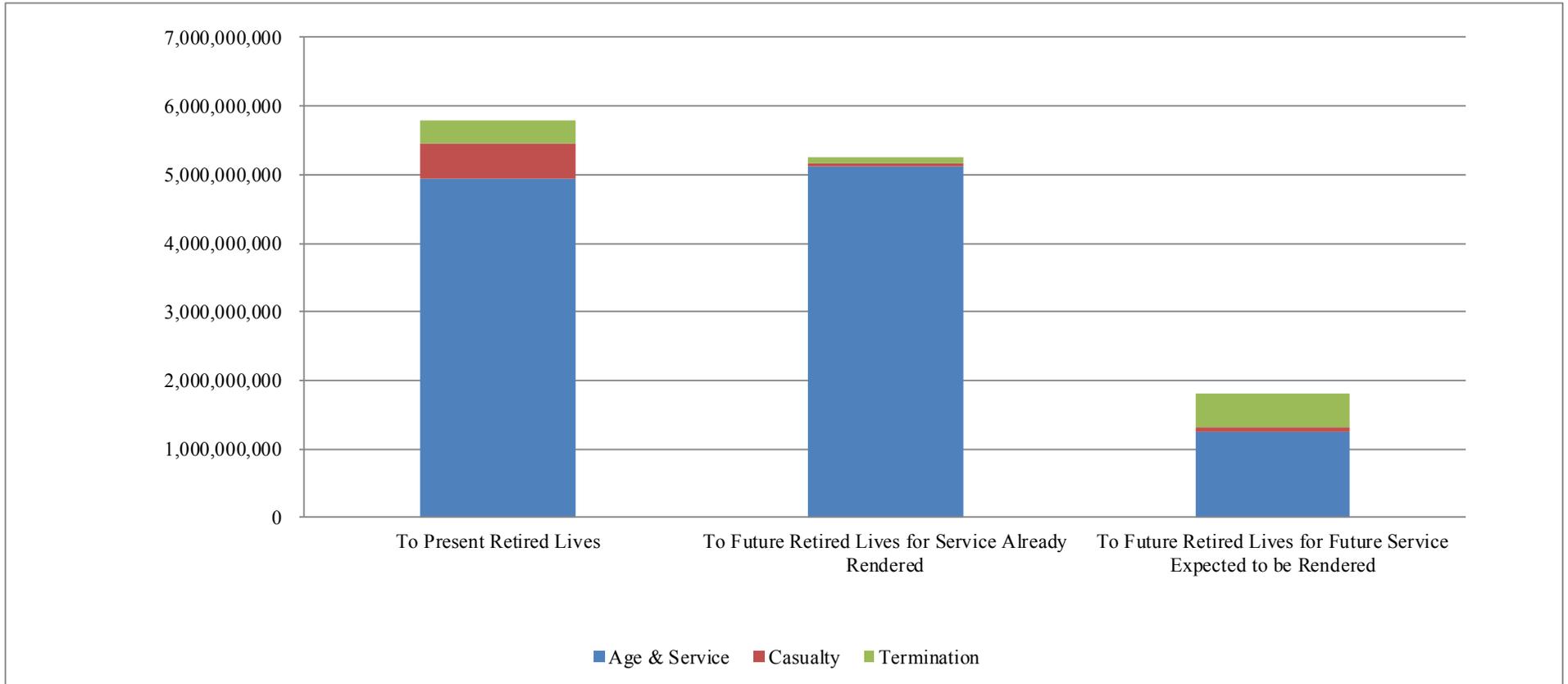
Sources of Funds

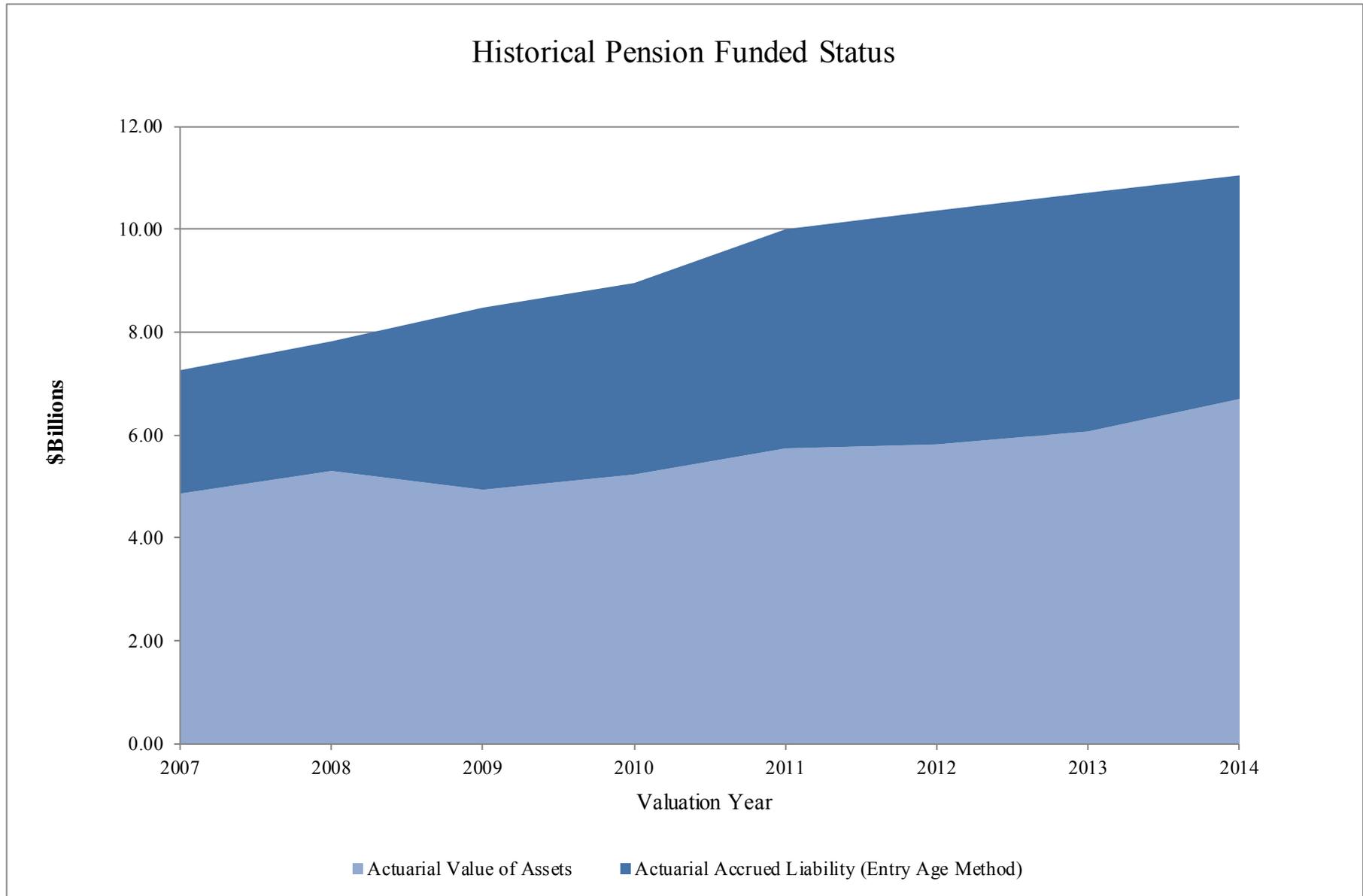


Uses of Funds



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, 2014.

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 Statement No. 43 (GASB No. 43), and it provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods. This report also provides information for GASB No. 25. The June 30, 2014 valuation report will be the last valuation report to contain GASB No. 25 information.

Calculations required for compliance with the Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 will be issued in separate reports.

Valuations for certifying contribution rates are prepared biennially, as of June 30 on the odd numbered years (2015, 2017, etc.). The June 30, 2014 actuarial valuation is an interim valuation that estimates the Fiscal Year 2018 and Fiscal Year 2019 contribution rates. Ultimately, the June 30, 2015 actuarial valuation will establish the Fiscal Year 2018 and Fiscal Year 2019 employer contribution rates. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

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 22 years for Fiscal Year 2018 and 21 years for Fiscal Year 2019.

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.

	Estimated Employer Contribution Rates as a Percent of Payroll				
	State Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.34%		20.88%	23.38%	11.73%
Medical Subsidy	1.03%		3.91%	3.91%	1.40%
Total	11.37%		24.79%	27.29%	13.13%

	Estimated Employer Contribution Rates as a Percent of Payroll				
	Political Subdivision Members				
	Employees	Teachers	Police	Fire	Total*
Pension	10.34%	12.09%	20.88%	23.38%	13.12%
Medical Subsidy	0.28%	1.23%	3.91%	3.91%	1.37%
Total	10.62%	13.32%	24.79%	27.29%	14.49%

* The grand total contribution rates for NHRS (State and Political Subdivisions combined) are 12.80% of payroll for pension and 1.38% for the medical subsidy for a grand total of 14.18% 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.

Estimated contribution rates for pension and medical subsidy illustrate the improvement of plan experience over the measurement period. However, they should not be relied upon as an indication of the actual employer contribution rates which will be set for Fiscal Year 2018 and Fiscal Year 2019. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

The 401(h) account balance for Teachers is negative as of June 30, 2014.

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, 2030. This is two years later than 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. This is one year later than the projection in the prior valuation.

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, 2018 and maintain that margin thereafter. It is imperative that NHRS monitor collections closely to ensure the necessary funds are collected to provide the benefit.

History of Certified 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	\$115.5	\$126.1	\$58.9	\$27.9	\$328.4
2015	\$117.9	\$128.3	\$59.9	\$28.4	\$334.5
2016	\$127.2	\$141.6	\$65.6	\$31.4	\$365.8
2017	\$132.0	\$146.9	\$68.1	\$32.5	\$379.5

Medical Subsidy

Fiscal Year Ending	Employer Contribution Rates				Total
	State Employees	Political Sub	Teachers	Police & Fire	
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	Political Sub	Teachers	Police & Fire	
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	\$23.3	\$15.4	\$48.9
2015	\$8.4	\$2.0	\$23.6	\$15.8	\$49.8
2016	\$8.8	\$2.0	\$32.8	\$15.9	\$59.5
2017	\$9.1	\$2.0	\$34.1	\$16.5	\$61.8

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	\$78.9	\$74.7	\$31.8	\$13.7	\$199.0
2015	\$79.1	\$75.1	\$32.4	\$14.1	\$200.6
2016	\$82.0	\$77.9	\$33.6	\$14.6	\$208.2
2017	\$85.1	\$80.8	\$34.9	\$15.2	\$216.0

* Dollar amounts for 2015 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.

Funded Status

As of the valuation date, the Unfunded Actuarial Accrued Liability (UAAL) is \$4,344.6 million (pension only), and the funded ratio (the ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability) is 60.7% (pension only). This valuation was prepared using the Entry-Age Actuarial Cost Method. For comparison, the funded ratio as of June 30, 2013 was 56.7% (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 \$692 million as of the valuation date (see page 39). 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 17.23% for the year ending June 30, 2014. (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 12.28% for the year ending June 30, 2014.

The total market value as of June 30, 2014 is \$7.41 billion. The actuarial value of assets as of June 30, 2014 is \$6.72 billion.

Please see Section C for additional asset information.

Summary of Changes from June 30, 2013 to June 30, 2014

	Pension				
	Employees	Teachers	Police	Fire	Total
Reconciliation of UAAL					
Expected	\$1,600.3	\$1,952.0	\$792.0	\$369.8	\$4,714.1
Impact of (Gain)Loss	(103.8)	(155.4)	(66.5)	(43.8)	(369.5)
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	\$1,496.5	\$1,796.6	\$725.5	\$326.0	\$4,344.6
Funded %					
Prior Valuation	55.6 %	54.0 %	61.3 %	62.4 %	56.7 %
Expected Change	1.0 %	0.3 %	0.6 %	0.1 %	0.6 %
Impact of Gain(Loss)	2.9 %	3.7 %	3.3 %	4.5 %	3.4 %
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	59.5 %	58.0 %	65.2 %	67.0 %	60.7 %
Reconciliation of Employer Contribution Rate					
State Employees					
Prior Valuation	10.86 %		22.54 %	25.32 %	12.40 %
Impact of (Gain)Loss	(0.52)%		(1.66)%	(1.94)%	(0.67)%
Impact of Assumption Change	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>
Total	10.34 %		20.88 %	23.38 %	11.73 %
Political Subdivision Employees					
Prior Valuation	10.86 %	12.72 %	22.54 %	25.32 %	13.88 %
Impact of (Gain)Loss	(0.52)%	(0.63)%	(1.66)%	(1.94)%	(0.76)%
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	10.34 %	12.09 %	20.88 %	23.38 %	13.12 %
Medical Subsidy					
	State	Political	Teachers	Police & Fire	Total
	Employees	Subdivision Employees			
Reconciliation of UAAL					
Expected	\$ 79.4	\$ 45.6	\$ 251.4	\$ 341.1	\$717.5
Impact of (Gain)Loss	(1.6)	(2.9)	(1.5)	(18.6)	(24.6)
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	\$77.8	\$42.7	\$249.9	\$322.5	\$692.9
Reconciliation of Employer Contribution Rate					
Prior Valuation	1.64 %	0.31 %	2.95 %	3.84 %	2.21 %
Impact of (Gain)Loss	(0.61)%	(0.03)%	(1.72)%	0.07 %	(0.83)%
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	1.03 %	0.28 %	1.23 %	3.91 %	1.38 %

Discussion and Comments

Comment 1:

In total, plan experience between June 30, 2013 and June 30, 2014 was favorable for pension and the medical subsidy. The dollar weighted rate of return for the year ending June 30, 2014 was 17.23% on the market value of assets and 12.28% on the actuarial value of assets, resulting in a recognized asset gain of \$273 million (pension and medical subsidy combined). Total covered payroll increased by 0.25% versus the assumed increase of 3.75% resulting in pension liability gains. Between the 2013 and 2014 valuation, the pension funded ratio increased by 4.0% (56.7% to 60.7%).

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 22 years remaining in the 2018 Fiscal Year. Medical Subsidy contribution rates are expected to decline as the covered population diminishes. 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 16.

Comment 2:

June 30, 2014 Medical Subsidy Contribution Rates

Medical Subsidy benefits continue to warrant close monitoring. 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 elected to accelerate the 20% margin requirement from the end of the rate setting biennium to one year earlier. As of this valuation, the Teachers' 401(h) account is projected to achieve a 20% margin by the end of the 2016-2017 biennium.

For purposes of determining the estimated contribution rates for the 2018-19 biennium as shown on page 1, we have assumed that benefits for all members receiving a benefit on the valuation date and those Group I eligible members not yet age 60 get paid, and that each subaccount maintains at least a 20% margin each year.

There were more benefits paid from the Teachers 401(h) account than expected and less paid from the other accounts. We did not perform an in-depth review of the data, but indications are that Teachers lived longer than expected and some members eligible but previously not receiving benefits elected coverage during the year. There are a significant number of eligible members who are not receiving benefits that are not reflected in the valuation. We recommend reviewing this data more in-depth during the experience study and developing an opt-in assumption for these members.

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, 2014 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	8.32 %	7.12 %	12.55 %	13.53 %	8.61 %
Member	7.00 %	7.00 %	11.55 %	11.80 %	7.71 %
Employer	1.32 %	0.12 %	1.00 %	1.73 %	0.90 %

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 16% of the total active population. 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.

The steps in this implementation process are as follows:

- We have issued a GASB No. 67 report for the plan's fiscal year ending June 30, 2014 in December 2014. This includes the determination of the GASB discount rate for the plan as a whole.
- We anticipate issuing a GASB No. 68 report as of June 30, 2014 before the end of the 2015 fiscal year. This report will include proportionate shares of the Net Pension Liability, Pension Expense, and Deferred Inflow and Outflows for all participating employers.
- Based on our discussion with NHRS staff, the participating employers have fiscal years ending June 30th or December 31st. Under the GASB rules, employers implementing GASB No. 68 for fiscal years ending June 30, 2015 may use a measurement date as of June 30, 2014 and therefore use the report issued well in advance of their fiscal year end.

For those employers implementing GASB No. 68 for fiscal years ending December 31, 2015, they may use a measurement date as of June 30, 2015. The expectation is that the June 30, 2015 GASB No. 68 report will be available on or around December 31, 2015 giving them sufficient time to finalize their financial reports.

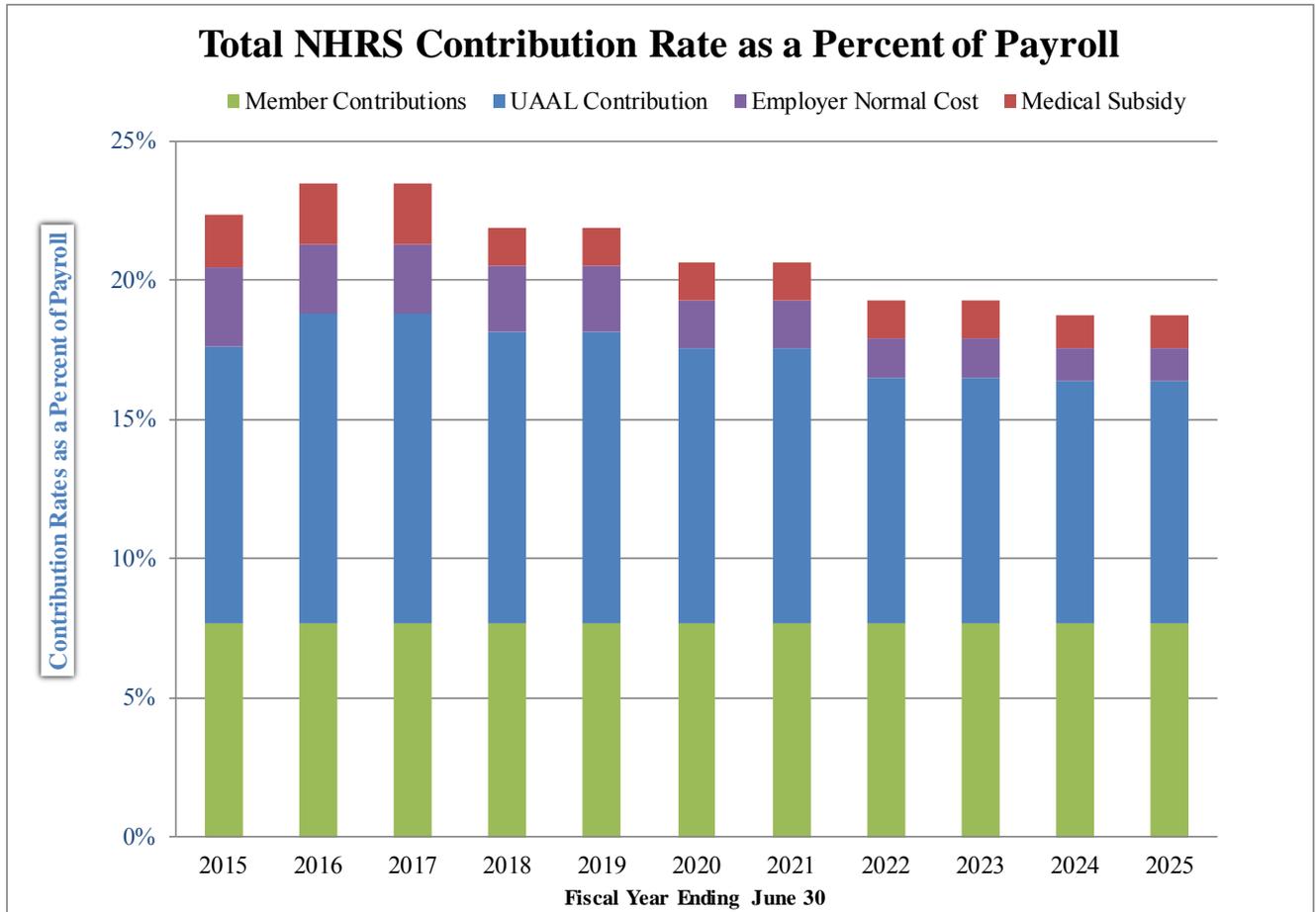
- The GASB has issued exposure drafts for OPEB valuations similar to the new pension standards. It will be a few years before any new OPEB standards come into effect, but they are coming in the next few years and will likely include similar proportionate share calculations for employers.

Comment 5:

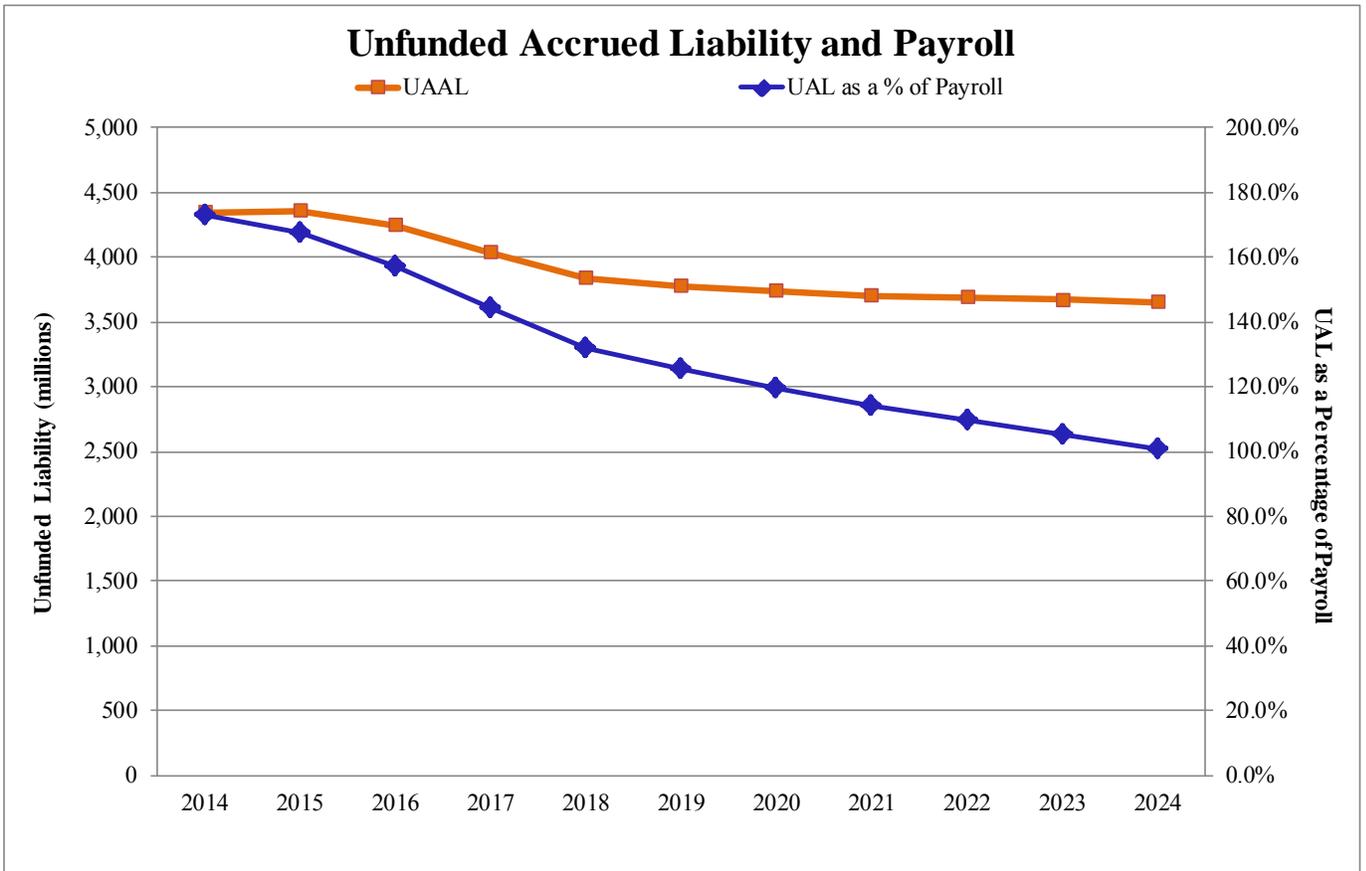
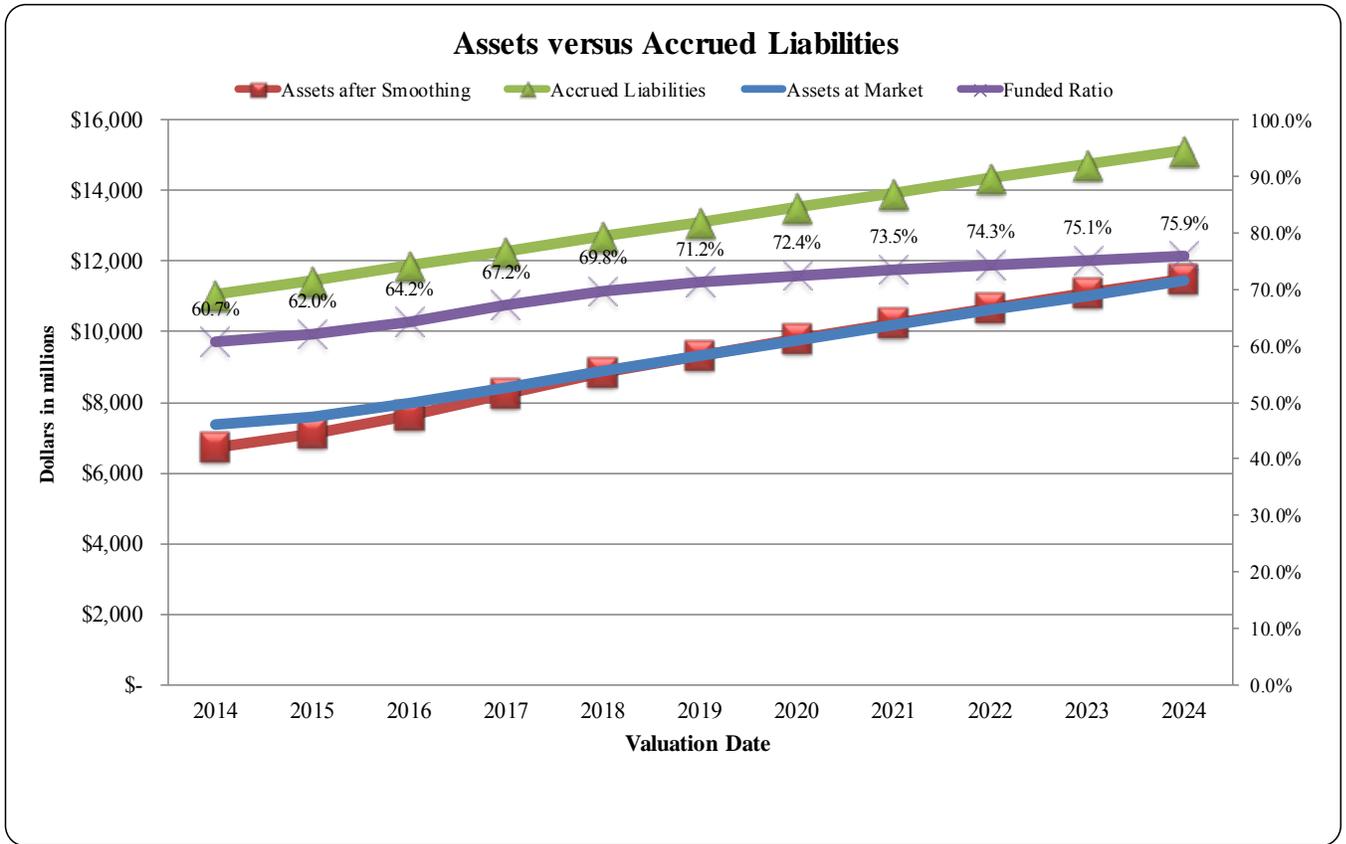
The System will undergo an experience study for the 5-year period ending June 30, 2015. It is our understanding that the final contribution rates for Fiscal Year 2018 and Fiscal Year 2019 will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report.

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	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Medical Subsidy	1.90%	2.21%	2.21%	1.38%	1.38%	1.38%	1.38%	1.33%	1.33%	1.21%	1.21%
Employer Normal Cost	2.86%	2.47%	2.47%	2.37%	2.37%	1.71%	1.71%	1.43%	1.43%	1.19%	1.19%
UAAL Contribution	9.93%	11.08%	11.08%	10.43%	10.43%	9.85%	9.85%	8.78%	8.78%	8.65%	8.65%
Employer Subtotal	14.69%	15.76%	15.76%	14.18%	14.18%	12.94%	12.94%	11.54%	11.54%	11.05%	11.05%
Member Contributions	7.69%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%	7.71%
Grand Total	22.38%	23.47%	23.47%	21.89%	21.89%	20.65%	20.65%	19.25%	19.25%	18.76%	18.76%



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, declining medical subsidy contributions as a percent of payroll, and decreases from the asset smoothing method caused by past gains being phased into the actuarial value of assets. Note that for the current valuation, the determination of the UAAL amortization assumes no future asset gains or losses.
2. The funded ratio is projected to increase steadily to 76% 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, 2014.
4. The projection is highly sensitive to the actual and expected profile of new hires. This is the third 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	6.00%		9.94%	14.67%	6.54%
Termination	2.24%		5.01%	2.15%	2.58%
Death-in-Service	0.19%		0.18%	0.14%	0.19%
Disability	0.28%		0.88%	0.91%	0.36%
Expenses	<u>0.35%</u>		<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>
Total	9.06%		16.36%	18.22%	10.02%
UAAL Payment*	<u>8.28%</u>		<u>16.07%</u>	<u>16.96%</u>	<u>9.30%</u>
Total Pension Contribution	17.34%		32.43%	35.18%	19.32%
Fiscal Year 2018					
Member Contributions	7.00%		11.55%	11.80%	7.59%
Employer Pension Contribution	10.34%		20.88%	23.38%	11.73%
Employer Medical Subsidy Contribution	<u>1.03%</u>		<u>3.91%</u>	<u>3.91%</u>	<u>1.40%</u>
Total Employer Contribution	11.37%	N/A	24.79%	27.29%	13.13%
Estimated Dollar Contribution	\$ 65,586,717	N/A	\$ 20,225,973	\$ 1,194,811	\$ 87,007,501
Fiscal Year 2019					
Member Contributions	7.00%		11.55%	11.80%	7.59%
Employer Pension Contribution	10.34%		20.88%	23.38%	11.73%
Employer Medical Subsidy Contribution	<u>1.03%</u>		<u>3.91%</u>	<u>3.91%</u>	<u>1.40%</u>
Total Employer Contribution	11.37%	N/A	24.79%	27.29%	13.13%
Estimated Dollar Contribution	\$ 68,046,219	N/A	\$ 20,984,447	\$ 1,239,617	\$ 90,270,283
Contribution Rates from Prior Valuation					
FY 2016#	12.50%		26.38%	29.16%	14.33%
FY 2017#	12.50%		26.38%	29.16%	14.33%

* Unfunded Actuarial Accrued Liability, financed over a 22-year period from the contribution effective date -- 7/1/2017.

Computed in June 30, 2013 Actuarial Valuation.

Estimated contribution rates for pension and medical subsidy illustrate the improvement of plan experience over the measurement period. However, they should not be relied upon as an indication of the actual employer contribution rates which will be set for Fiscal Year 2018 and Fiscal Year 2019. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

Development of Employer Contribution Rates Political Subdivision Members

Division:	Employees	Teachers	Police	Fire	Total
Normal Cost					
Age and Service Retirement	6.00%	6.05%	9.94%	14.67%	6.94%
Termination	2.24%	2.09%	5.01%	2.15%	2.44%
Death-in-Service	0.19%	0.09%	0.18%	0.14%	0.13%
Disability	0.28%	0.02%	0.88%	0.91%	0.24%
Expenses	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>	<u>0.35%</u>
Total	9.06%	8.60%	16.36%	18.22%	10.10%
UAAL Payment*	<u>8.28%</u>	<u>10.49%</u>	<u>16.07%</u>	<u>16.96%</u>	<u>10.77%</u>
Total Pension Contribution	17.34%	19.09%	32.43%	35.18%	20.87%
Fiscal Year 2018					
Member Contributions	7.00%	7.00%	11.55%	11.80%	7.75%
Employer Pension Contribution	10.34%	12.09%	20.88%	23.38%	13.12%
Employer Medical Subsidy Contribution	<u>0.28%</u>	<u>1.23%</u>	<u>3.91%</u>	<u>3.91%</u>	<u>1.37%</u>
Total Employer Contribution	10.62%	13.32%	24.79%	27.29%	14.49%
Estimated Dollar Contribution	\$ 72,679,057	\$ 159,558,964	\$ 57,468,732	\$ 35,176,231	\$ 324,882,984
Fiscal Year 2019					
Member Contributions	7.00%	7.00%	11.55%	11.80%	7.75%
Employer Pension Contribution	10.34%	12.09%	20.88%	23.38%	13.12%
Employer Medical Subsidy Contribution	<u>0.28%</u>	<u>1.23%</u>	<u>3.91%</u>	<u>3.91%</u>	<u>1.37%</u>
Total Employer Contribution	10.62%	13.32%	24.79%	27.29%	14.49%
Estimated Dollar Contribution	\$ 75,404,522	\$ 165,542,425	\$ 59,623,809	\$ 36,495,340	\$ 337,066,096
Contribution Rates from Prior Valuation					
FY 2016#	11.17%	15.67%	26.38%	29.16%	16.17%
FY 2017#	11.17%	15.67%	26.38%	29.16%	16.17%

* Unfunded Actuarial Accrued Liability, financed over a 22-year period from the contribution effective date -- 7/1/2017.

Computed in June 30, 2013 Actuarial Valuation.

Estimated contribution rates for pension and medical subsidy illustrate the improvement of plan experience over the measurement period. However, they should not be relied upon as an indication of the actual employer contribution rates which will be set for Fiscal Year 2018 and Fiscal Year 2019. It is our understanding that the final contribution rates for those years will be set following the conclusion and acceptance by the Board of the Fiscal Year 2015 valuation, which will include: (a) plan experience for the 2015 Fiscal Year, and (b) revised actuarial assumptions developed following the conclusion of a five-year experience study which will begin later this calendar year and which will be incorporated into the Fiscal Year 2015 valuation report. The final Fiscal Year 2018 and Fiscal Year 2019 rates may be higher or lower than the Fiscal Year 2016 and Fiscal Year 2017 rates currently in effect.

Development of Pension Actuarial Liabilities

June 30, 2014

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	\$ 6,362,964,974	\$ 1,248,409,380	\$ 5,114,555,594
Disability benefits likely to be paid to present active members	57,225,259	48,111,995	9,113,264
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	56,802,450	24,777,018	32,025,432
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	427,212,628	497,544,036	(70,331,408)
Benefits likely to be paid to current inactive and vested deferred members	170,759,357	-	170,759,357
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	5,789,051,627	-	5,789,051,627
Total	\$ 12,864,016,295	\$ 1,818,842,429	\$ 11,045,173,866
Actuarial Value of Assets	\$ 6,700,553,435	\$ -	\$ 6,700,553,435
Liabilities to be Covered by Future Contributions	\$ 6,163,462,860	\$ 1,818,842,429	\$ 4,344,620,431
Funded Ratio			60.7%

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

Level Percent Amortization

Fiscal Year	Employer Contribution Rates	Projected Payroll	UAAL Beginning of Year	UAAL Payment	UAAL End of Year	Funded Ratio
Ending Year June 30,	UAAL Payment					
2015	10.41%	\$ 2,602	\$ 4,345	\$ 271	\$ 4,400	60.7%
2016	11.18%	2,700	4,400	302	4,428	60.9%
2017	11.18%	2,801	4,428	313	4,446	62.1%
1 2018	10.43%	2,906	4,446	303	4,476	63.2%
2 2019	10.43%	3,015	4,476	314	4,496	64.3%
3 2020	10.43%	3,128	4,496	326	4,506	65.3%
4 2021	10.43%	3,245	4,506	338	4,504	66.4%
5 2022	10.43%	3,367	4,504	351	4,488	67.5%
6 2023	10.43%	3,493	4,488	364	4,458	68.7%
7 2024	10.43%	3,624	4,458	378	4,411	70.0%
8 2025	10.43%	3,760	4,411	392	4,345	71.3%
9 2026	10.43%	3,901	4,345	407	4,260	72.7%
10 2027	10.43%	4,047	4,260	422	4,151	74.1%
11 2028	10.43%	4,199	4,151	438	4,018	75.7%
12 2029	10.43%	4,356	4,018	454	3,858	77.4%
13 2030	10.43%	4,520	3,858	471	3,668	79.1%
14 2031	10.43%	4,689	3,668	489	3,444	81.0%
15 2032	10.43%	4,865	3,444	507	3,184	83.0%
16 2033	10.43%	5,048	3,184	526	2,884	85.1%
17 2034	10.43%	5,237	2,884	546	2,541	87.3%
18 2035	10.43%	5,433	2,541	567	2,149	89.7%
19 2036	10.43%	5,637	2,149	588	1,705	92.1%
20 2037	10.43%	5,848	1,705	610	1,204	94.6%
21 2038	10.43%	6,068	1,204	633	640	97.3%
22 2039	10.43%	6,295	640	657	-	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			
	Fiscal Year	Beginning	UAAL	UAAL End	Funded
Year	Ending June 30,	of Year	Payment	of Year	Ratio
	2015	\$ 4,345	\$ 271	\$ 4,400	60.7%
	2016	4,400	302	4,428	60.9%
	2017	4,428	313	4,446	62.1%
1	2018	4,446	411	4,363	63.8%
2	2019	4,363	411	4,274	65.7%
3	2020	4,274	411	4,178	67.6%
4	2021	4,178	411	4,075	69.5%
5	2022	4,075	411	3,963	71.4%
6	2023	3,963	411	3,843	73.2%
7	2024	3,843	411	3,714	75.0%
8	2025	3,714	411	3,574	76.9%
9	2026	3,574	411	3,424	78.7%
10	2027	3,424	411	3,262	80.5%
11	2028	3,262	411	3,088	82.3%
12	2029	3,088	411	2,900	84.1%
13	2030	2,900	411	2,697	85.9%
14	2031	2,697	411	2,479	87.6%
15	2032	2,479	411	2,244	89.4%
16	2033	2,244	411	1,990	91.0%
17	2034	1,990	411	1,717	92.7%
18	2035	1,717	411	1,423	94.3%
19	2036	1,423	411	1,106	95.8%
20	2037	1,106	411	765	97.3%
21	2038	765	411	397	98.7%
22	2039	397	411	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, 2014

Assets and Present Value of Expected Future Contributions

	Pension	Medical Subsidy
A. Present valuation assets		
1. Net assets from system financial statements	\$ 7,390,628,021	\$ 23,433,965
2. Reserve for TSAs	-	-
3. Funding value adjustment	(690,074,586)	(2,188,066)
4. Valuation assets	6,700,553,435	21,245,899
B. Actuarial present value of expected future employer contributions		
1. For normal costs	288,104,663	16,397,777
2. For unfunded actuarial accrued liability	4,344,620,431	692,857,517
3. Total	4,632,725,094	709,255,294
C. Actuarial present value of expected future member contributions	1,530,737,766	-
D. Total Present and Expected Future Resources	\$ 12,864,016,295	\$ 730,501,193

Present Value of Expected Future Benefit Payments

	Pension	Medical Subsidy
A. To retirees and beneficiaries	\$ 5,789,051,627	\$ 566,907,758
B. To vested terminated members	114,098,396	-
C. To non-vested terminated members (outstanding refunds)	56,660,961	-
D. To present active members		
1. Allocated to service rendered prior to valuation date - actuarial accrued liability	5,085,362,882	147,195,658
2. Allocated to service likely to be rendered after valuation date	1,818,842,429	16,397,777
3. Total	6,904,205,311	163,593,435
E. Total Actuarial Present Value of Expected Future Pension Payments	\$ 12,864,016,295	\$ 730,501,193

Experience Gain/(Loss) -- June 30, 2014

	Pension	Medical Subsidy
(1) UAAL* at start of biennium	\$ 4,638,087,179	\$ 710,048,825
(2) Normal cost from last valuation for year 1	254,583,262	3,056,203
(3) Actual contributions (employer and employee) for year 1	527,477,252	48,881,484
(4) Interest accrual: [(1)+1/2 [(2)-(3)]] x .0775	348,877,114	53,253,054
(5) Expected UAAL end of year 1: (1)+(2)-(3)+(4)	4,714,070,303	717,476,598
(6) Change from legislation	-	-
(7) Change from revised actuarial assumptions	-	-
(8) Other	-	-
(9) Expected UAAL after changes: (5)+(6)+(7)+(8)	4,714,070,303	717,476,598
(10) Actual UAAL at end of year	4,344,620,431	692,857,517
(11) Gain/(loss) for year 1: (9)-(10)	369,449,872	24,619,081
(12) Gain/(loss) as percent of actuarial accrued liabilities at start of year	3.4 %	3.4 %

* *Unfunded Actuarial Accrued Liabilities.*

Summary of Risk Measures

Valuation Year	Funded Ratio	Actual Total Payroll / Expected Total Payroll	UAAL Amortization Period	UAAL / Total Payroll	Funding Value of Assets / Total Payroll	Total AAL / Total Payroll	Standard Deviation of Investment Return / Total Payroll
June 30, 2007*	67.0 %	98 %	30	1.1	2.2	3.3	***
June 30, 2008	67.8	101	30	1.1	2.3	3.4	***
June 30, 2009*	58.3	101	30	1.4	2.0	3.5	23%
June 30, 2010	58.5	97	30	1.5	2.1	3.6	23%
June 30, 2011#*	57.4	97	29	1.7	2.3	4.0	26%
June 30, 2012	56.1	95	28	1.8	2.3	4.2	28%
June 30, 2013	56.7	97	27	1.9	2.4	4.3	29%
June 30, 2014	60.7	97	26	1.7	2.7	4.4	32%

After reflection of changes in assumptions.

* After reflection of changes in legislation.

*** Unavailable.

These risk measures are provided in accordance with the System's Actuarial Funding Policy. Short term fluctuations will occur due to experience, plan changes, and assumption and method changes. Long term expectations are described below.

Funded Ratio: The funded ratio is expected to trend toward 100% by June 30, 2039 under the statutory 30-year amortization period.

Actual Total Payroll / Expected Total Payroll: This ratio is expected to remain near 100% each year.

UAAL Amortization Period: The statutory amortization period is decreased by one year each year beginning with the 2010-2011 biennium.

UAAL / Total Payroll: The ratio of the unfunded actuarial accrued liability to payroll is expected to trend toward 0% by June 30, 2039.

Funding Value of Assets / Total Payroll: As the funded ratio increases, this ratio is expected to converge to the ratio of Total AAL / Payroll.

Total AAL / Total Payroll: Total AAL / Total Payroll is expected to grow as the System matures. The rate of growth may slow down as members hired on or after July 1, 2011 replace current members.

Standard Deviation of Investment Return / Total Payroll: This measure illustrates the impact of a one standard deviation change in investment return as a percent of payroll. Investment return experience other than expected ultimately affects the employer contribution rates. The higher the ratio of this risk metric, the greater the expected volatility in employer contribution rates. Absent changes in investment policy, this metric is expected to increase as the assets grow to 100% of the AAL.

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; and
- 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								
Fiscal Year	(1)	(2)	(3)	Net Assets Available for Benefits	Percentage of Accrued Liabilities Covered by Net Assets Available			
	Aggregate Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members (Employer Financed Portion)		(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%	
2014	2,842,340	5,789,052	2,413,782	6,700,553	100%	67%	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				Percentage of Accrued Liabilities Covered by Net Assets Available		
			(1)	(2)	(3)	Net Assets Available for Benefits	(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%
Employees	2014		1,083,878	1,823,517	784,437	2,195,284	100%	61%	0%
Teachers	2014		1,113,650	2,198,892	966,511	2,482,496	100%	62%	0%
Police	2014		422,972	1,209,741	454,133	1,361,280	100%	78%	0%
Fire	2014		221,840	556,902	208,701	661,493	100%	79%	0%

After reflection of changes in assumptions.

* After reflection of changes in legislation.

Development of Pension Actuarial Liabilities June 30, 2014

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	\$ 2,308,976,304	\$ 461,017,121	\$ 1,847,959,183
Disability benefits likely to be paid to present active members	14,247,611	19,774,586	(5,526,975)
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	31,098,538	13,889,440	17,209,098
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	121,056,797	196,386,987	(75,330,190)
Benefits likely to be paid to current inactive and vested deferred members	84,003,471	-	84,003,471
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	1,823,517,115	-	1,823,517,115
Total	\$ 4,382,899,836	\$ 691,068,134	\$ 3,691,831,702
Actuarial Value of Assets	\$ 2,195,284,493	-	\$ 2,195,284,493
Liabilities to be Covered by Future Contributions	\$ 2,187,615,343	\$ 691,068,134	\$ 1,496,547,209
Funded Ratio			59.5%

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					
	2015	8.38%	\$ 1,129	\$ 1,497	\$ 95	\$ 1,514	59.5%
	2016	8.80%	1,172	1,514	103	1,524	59.8%
	2017	8.80%	1,216	1,524	107	1,531	61.2%
1	2018	8.28%	1,262	1,531	104	1,542	62.5%
2	2019	8.28%	1,309	1,542	108	1,549	63.8%
3	2020	8.28%	1,358	1,549	112	1,553	65.0%
4	2021	8.28%	1,409	1,553	117	1,552	66.3%
5	2022	8.28%	1,462	1,552	121	1,547	67.6%
6	2023	8.28%	1,517	1,547	126	1,536	68.9%
7	2024	8.28%	1,574	1,536	130	1,520	70.3%
8	2025	8.28%	1,633	1,520	135	1,498	71.7%
9	2026	8.28%	1,694	1,498	140	1,469	73.1%
10	2027	8.28%	1,758	1,469	146	1,431	74.7%
11	2028	8.28%	1,824	1,431	151	1,385	76.3%
12	2029	8.28%	1,892	1,385	157	1,329	78.0%
13	2030	8.28%	1,963	1,329	163	1,263	79.7%
14	2031	8.28%	2,037	1,263	169	1,185	81.6%
15	2032	8.28%	2,113	1,185	175	1,095	83.6%
16	2033	8.28%	2,192	1,095	181	992	85.7%
17	2034	8.28%	2,274	992	188	874	87.8%
18	2035	8.28%	2,359	874	195	739	90.1%
19	2036	8.28%	2,447	739	203	586	92.5%
20	2037	8.28%	2,539	586	210	413	94.9%
21	2038	8.28%	2,634	413	218	219	97.4%
22	2039	8.28%	2,733	219	226	-	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, 2014

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	\$ 2,517,364,799	\$ 471,796,537	\$ 2,045,568,262
Disability benefits likely to be paid to present active members	2,156,874	1,698,918	457,956
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	16,673,946	6,123,439	10,550,507
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	133,323,402	181,559,968	(48,236,566)
Benefits likely to be paid to current inactive and vested deferred members	71,821,048	-	71,821,048
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	2,198,891,802	-	2,198,891,802
Total	\$ 4,940,231,871	\$ 661,178,862	\$ 4,279,053,009
Actuarial Value of Assets	\$ 2,482,496,580	-	\$ 2,482,496,580
Liabilities to be Covered by Future Contributions	\$ 2,457,735,291	\$ 661,178,862	\$ 1,796,556,429
Funded Ratio			58.0%

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					
	2015	10.36%	\$ 1,073	\$ 1,797	\$ 111	\$ 1,821	58.0%
	2016	11.12%	1,113	1,821	124	1,833	58.1%
	2017	11.12%	1,155	1,833	128	1,842	59.1%
1	2018	10.49%	1,198	1,842	126	1,854	60.1%
2	2019	10.49%	1,243	1,854	130	1,863	61.1%
3	2020	10.49%	1,290	1,863	135	1,867	62.1%
4	2021	10.49%	1,338	1,867	140	1,866	63.1%
5	2022	10.49%	1,388	1,866	146	1,859	64.3%
6	2023	10.49%	1,440	1,859	151	1,846	65.4%
7	2024	10.49%	1,494	1,846	157	1,826	66.7%
8	2025	10.49%	1,550	1,826	163	1,798	68.1%
9	2026	10.49%	1,608	1,798	169	1,762	69.6%
10	2027	10.49%	1,668	1,762	175	1,717	71.2%
11	2028	10.49%	1,731	1,717	182	1,661	72.9%
12	2029	10.49%	1,796	1,661	188	1,595	74.7%
13	2030	10.49%	1,863	1,595	195	1,516	76.7%
14	2031	10.49%	1,933	1,516	203	1,423	78.7%
15	2032	10.49%	2,005	1,423	210	1,315	81.0%
16	2033	10.49%	2,080	1,315	218	1,191	83.3%
17	2034	10.49%	2,158	1,191	226	1,049	85.8%
18	2035	10.49%	2,239	1,049	235	886	88.4%
19	2036	10.49%	2,323	886	244	701	91.2%
20	2037	10.49%	2,410	701	253	493	94.0%
21	2038	10.49%	2,500	493	262	259	97.0%
22	2039	10.49%	2,594	259	272	-	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, 2014

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	\$ 983,876,524	\$ 180,135,019	\$ 803,741,505
Disability benefits likely to be paid to present active members	27,272,056	17,601,824	9,670,232
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	6,452,442	3,387,762	3,064,680
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	146,222,555	98,338,611	47,883,944
Benefits likely to be paid to current inactive and vested deferred members	12,745,272	-	12,745,272
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	1,209,740,599	-	1,209,740,599
Total	\$ 2,386,309,448	\$ 299,463,216	\$ 2,086,846,232
Actuarial Value of Assets	\$ 1,361,279,705	-	\$ 1,361,279,705
Liabilities to be Covered by Future Contributions	\$ 1,025,029,743	\$ 299,463,216	\$ 725,566,527
Funded Ratio			65.2%

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					
	2015	16.54%	\$ 281	\$ 726	\$ 46	\$ 734	65.2%
	2016	17.73%	291	734	52	737	65.7%
	2017	17.73%	302	737	54	738	66.8%
1	2018	16.07%	313	738	50	743	67.8%
2	2019	16.07%	325	743	52	747	68.6%
3	2020	16.07%	337	747	54	749	69.5%
4	2021	16.07%	350	749	56	749	70.4%
5	2022	16.07%	363	749	58	746	71.4%
6	2023	16.07%	377	746	61	741	72.4%
7	2024	16.07%	391	741	63	733	73.4%
8	2025	16.07%	406	733	65	722	74.5%
9	2026	16.07%	421	722	68	708	75.7%
10	2027	16.07%	437	708	70	690	77.0%
11	2028	16.07%	453	690	73	668	78.4%
12	2029	16.07%	470	668	76	640	79.8%
13	2030	16.07%	488	640	78	609	81.4%
14	2031	16.07%	506	609	81	572	83.1%
15	2032	16.07%	525	572	84	529	84.8%
16	2033	16.07%	545	529	88	479	86.7%
17	2034	16.07%	565	479	91	421	88.7%
18	2035	16.07%	586	421	94	356	90.8%
19	2036	16.07%	608	356	98	282	93.0%
20	2037	16.07%	631	282	101	199	95.3%
21	2038	16.07%	655	199	105	106	97.6%
22	2039	16.07%	680	106	109	-	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, 2014

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	\$ 552,747,347	\$ 135,460,703	\$ 417,286,644
Disability benefits likely to be paid to present active members	13,548,718	9,036,667	4,512,051
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	2,577,524	1,376,377	1,201,147
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	26,609,874	21,258,470	5,351,404
Benefits likely to be paid to current inactive and vested deferred members	2,189,566	-	2,189,566
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	556,902,111	-	556,902,111
Total	\$ 1,154,575,140	\$ 167,132,217	\$ 987,442,923
Actuarial Value of Assets	\$ 661,492,657	-	\$ 661,492,657
Liabilities to be Covered by Future Contributions	\$ 493,082,483	\$ 167,132,217	\$ 325,950,266
Funded Ratio			67.0%

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					
	2015	17.37%	\$ 119	\$ 326	\$ 21	\$ 329	67.0%
	2016	18.90%	123	329	23	331	67.5%
	2017	18.90%	128	331	24	332	68.6%
1	2018	16.96%	133	332	23	334	69.5%
2	2019	16.96%	138	334	23	336	70.4%
3	2020	16.96%	143	336	24	337	71.3%
4	2021	16.96%	148	337	25	337	72.2%
5	2022	16.96%	154	337	26	336	73.1%
6	2023	16.96%	160	336	27	334	74.0%
7	2024	16.96%	166	334	28	331	75.0%
8	2025	16.96%	172	331	29	327	76.0%
9	2026	16.96%	178	327	30	321	77.1%
10	2027	16.96%	185	321	31	314	78.2%
11	2028	16.96%	192	314	33	304	79.5%
12	2029	16.96%	199	304	34	292	80.8%
13	2030	16.96%	206	292	35	278	82.3%
14	2031	16.96%	214	278	36	262	83.8%
15	2032	16.96%	222	262	38	243	85.4%
16	2033	16.96%	230	243	39	221	87.1%
17	2034	16.96%	239	221	41	196	88.9%
18	2035	16.96%	248	196	42	168	90.8%
19	2036	16.96%	257	168	44	135	92.8%
20	2037	16.96%	267	135	45	99	94.9%
21	2038	16.96%	277	99	47	58	97.1%
22	2039	16.96%	287	58	49	-	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

	<u>June 30, 2014</u>	<u>June 30, 2013</u>
ASSETS		
Current Assets		
Cash - Local Custodian	\$ 9,908,820	\$ 7,697,561
Contributions Receivable	64,131,764	56,367,007
OPEB Plan Receivable	12,405,894	10,881,812
Receivable for Investments Sold	11,960,669	275,684,464
Interest and Dividends Receivable	18,578,017	17,577,403
Other Receivables	0	1,209,108
Foreign Taxes Receivable	2,496,541	2,748,017
Prepaid Management Fees	97,484	98,925
Total Current Assets	<u>\$ 119,579,189</u>	<u>\$ 372,264,297</u>
Capital Assets (Net of Accumulated Depreciation)	141,143	206,699
Investments at Quoted Market Value:		
Domestic Investments	3,106,663,594	2,816,863,094
International Investments	1,270,281,116	1,074,663,989
Global Investments	235,015,968	196,666,333
Fixed Income Investments	1,576,619,374	1,467,978,524
Investments at Fair Market Value:		
Alternative Investments	470,908,893	194,590,711
Absolute Return Strategies	4,073,848	25,692,568
Commercial R/E Investments (Net Equity)	657,232,721	572,554,877
Temporary Investments	13,164,567	4,137,332
TOTAL ASSETS	<u><u>\$ 7,453,680,413</u></u>	<u><u>\$ 6,725,618,424</u></u>
LIABILITIES		
Management Fees & Other Payables	\$ 8,993,907	\$ 8,556,618
OPEB Plan Payable	12,405,894	10,881,812
Payable for Investments Purchased	18,218,626	278,170,967
TOTAL LIABILITIES	<u>\$ 39,618,427</u>	<u>\$ 297,609,397</u>
TOTAL FUND BALANCES	<u><u>\$ 7,414,061,986</u></u>	<u><u>\$ 6,428,009,027</u></u>

Reconciliation of System Assets

Item	June 30, 2014				
	Employees	Teachers	Police#	Fire#	Total
A. Market Value of Assets at Beginning of Year	\$ 2,111,117,974	\$ 2,368,309,519	\$ 1,307,939,879	\$ 640,641,655	\$ 6,428,009,027
B. Revenues and Expenditures					
1. Contributions					
a. Employee Contributions	\$ 78,869,014	\$ 74,674,210	\$ 31,813,948	\$ 13,675,824	\$ 199,032,996
b. Employer Contributions	125,665,063	149,422,191	69,728,583	32,509,902	377,325,739
c. Total	\$ 204,534,077	\$ 224,096,401	\$ 101,542,531	\$ 46,185,726	\$ 576,358,735
2. Investment Return					
a. Interest, Dividends, and Other Income	\$ 53,217,938	\$ 60,546,322	\$ 33,235,172	\$ 16,257,521	\$ 163,256,953
b. Net Realized and Unrealized Gains/(Losses)	314,094,554	358,546,939	196,379,831	96,035,791	965,057,115
c. Investment Expenses	(9,884,694)	(11,267,221)	(6,174,535)	(3,019,450)	(30,345,900)
d. Net Investment Income	\$ 357,427,798	\$ 407,826,040	\$ 223,440,468	\$ 109,273,862	\$ 1,097,968,168
3. Benefits and Refunds					
a. Refunds	\$ (13,789,752)	\$ (7,188,167)	\$ (4,288,752)	\$ (853,089)	\$ (26,119,760)
b. Regular Monthly Benefits	(194,909,797)	(238,412,688)	(110,494,374)	(53,166,139)	(596,982,998)
c. Partial Lump-Sum Benefits Paid	(1,349,586)	(778,222)	(198,800)	(166,000)	(2,492,608)
d. Medical Premium Subsidy Payments	(14,080,685)	(23,750,279)	(10,375,368)	(5,605,411)	(53,811,743)
e. Total	\$ (224,129,820)	\$ (270,129,356)	\$ (125,357,294)	\$ (59,790,639)	\$ (679,407,109)
4. Administrative Expenses	\$ (2,412,058)	\$ (2,754,106)	\$ (1,508,737)	\$ (737,906)	\$ (7,412,807)
5. Miscellaneous Expenses	\$ (473,378)	\$ (540,261)	\$ (295,757)	\$ (144,636)	\$ (1,454,032)
6. Interest Expense on OPEB Deficit	\$ -	\$ (1,050,936)	\$ -	\$ -	\$ (1,050,936)
7. Interest Income on OPEB Deficit	\$ 777,693	\$ -	\$ 114,763	\$ 158,484	\$ 1,050,940
8. Transfers	\$ -	\$ -	\$ -	\$ -	\$ -
C. Market Value of Assets at End of Year	\$ 2,446,842,286	\$ 2,725,757,301	\$ 1,505,875,853	\$ 735,586,546	\$ 7,414,061,986

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:	2012	2013	2014	2015	2016	2017	2018
A. Funding Value Beginning of Year	\$5,798,249,321	\$ 5,846,570,198	\$ 6,092,504,545				
B. Market Value End of Year	5,774,343,173	6,428,009,027	7,414,061,986				
C. Market Value Beginning of Year	5,891,179,192	5,774,343,173	6,428,009,027				
D. Non-Investment Net Cash Flow	(135,992,268)	(164,621,788)	(111,915,208)				
E. Investment Income							
E1. Market Total: B - C - D	19,156,249	818,287,642	1,097,968,167				
E2. Assumed Rate	7.75%	7.75%	7.75%				
E3. Amount for Immediate Recognition	444,094,622	446,730,096	467,832,388				
E4. Amount for Phased-In Recognition: E1-E3	(424,938,373)	371,557,546	630,135,779				
F. Phased-In Recognition of Investment Income							
F1. Current Year: 0.20 x E3	(84,987,675)	74,311,509	126,027,156				
F2. First Prior Year	135,194,850	(84,987,675)	74,311,509	\$126,027,156			
F3. Second Prior Year	22,831,769	135,194,850	(84,987,675)	74,311,509	\$126,027,156		
F4. Third Prior Year	(183,524,414)	22,831,769	135,194,850	(84,987,675)	74,311,509	\$126,027,156	
F5. Fourth Prior Year	(149,296,007)	(183,524,414)	22,831,769	135,194,849	(84,987,673)	74,311,510	\$ 126,027,155
F6. Total Recognized Investment Gain	(259,781,477)	(36,173,961)	273,377,609	250,545,839	115,350,992	200,338,666	126,027,155
G. Preliminary Funding Value End of Year: A + D + E3 + F6	\$5,846,570,198	\$6,092,504,545	\$6,721,799,334				
H. Additional Recognized G/L due to Corridor	-	-	-				
I. Final Funding Value after 20% Corridor	\$5,846,570,198	\$ 6,092,504,545	\$ 6,721,799,334				
J. Difference between Market & Funding Value: B-I	\$ (72,227,025)	\$ 335,504,482	\$ 692,262,652				
K. Recognized Rate of Return	3.22%	7.12%	12.28%				
L. Market Rate of Return	0.33%	14.38%	17.23%				
M. Ratio of Funding Value to Market Value	101.25%	94.78%	90.66%				

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, 2014

	Employees	Teachers	Police	Fire	Total
Allocated Fund Assets (Actuarial Value)	\$ 2,218,376,769	\$ 2,471,249,044	\$ 1,365,269,849	\$ 666,903,672	\$ 6,721,799,334
Less Reserve for TSAs	-	-	-	-	-
Less 401(h) Account	(23,092,276)	11,247,536	(3,990,144)	(5,411,015)	(21,245,899)
Net Pension Valuation Assets	\$ 2,195,284,493	\$ 2,482,496,580	\$ 1,361,279,705	\$ 661,492,657	\$ 6,700,553,435

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, 2014.

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 %
June 30, 2014	6,700,553,435	11,045,173,866	4,344,620,431	60.7%	2,507,898,809	173.2 %

* After Benefit/Legislative changes.

After Assumption changes/methods.

Future valuation reports will not include GASB Statement No. 25 disclosures. Additional plan disclosures under the new GASB Statement No. 67 are issued in a separate report.

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	2,507,899	328,444	100 %
2015	2,917,226	12.79 %	373,113			
2016	2,793,874	13.55 %	378,570			
2017	2,898,644	13.55 %	392,766			
2018	2,905,778	12.80 %	371,833			
2019	3,014,745	12.80 %	385,777			

* 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 2017-18 biennium, the ARC is estimated based on the June 30, 2014 valuation. The actual ARC will be based on the June 30, 2015 valuation.

Developed by prior actuary. Actual contributions are based on the ARC % times actual payroll. For Fiscal Year 2008 and Fiscal Year 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.

Future valuation reports will not include GASB Statement No. 25 disclosures. Additional plan disclosures under the new GASB Statement No. 67 are issued in a separate report.

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, 2014
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Equivalent Single Amortization Period	22 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

Future valuation reports will not include GASB Statement No. 25 disclosures. Additional plan disclosures under the new GASB Statement No. 67 are issued in a separate report.

Post-Retirement Medical Subsidy
GASB Statement No. 43 Reporting

Determination of the Annual Required Contribution for Fiscal Years 2018 and 2019	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%	0.61%	0.09%
Termination	0.00%	0.00%	0.00%	0.02%	0.00%
Death-in-Service	0.00%	0.00%	0.00%	0.00%	0.00%
Disability	0.00%	0.00%	0.00%	0.06%	0.01%
Total Normal Cost	0.00%	0.00%	0.00%	0.69%	0.10%
Amortization of Unfunded Actuarial Accrued Liabilities#	1.03%	0.28%	1.23%	3.22%	1.28%
Annual Required Contribution (ARC)	1.03%	0.28%	1.23%	3.91%	1.38%
Fiscal Year 2018 (ARC)					
Percent of Payroll	1.03%	0.28%	1.23%	3.91%	1.38%
Estimated Dollars	\$ 5,941,453	\$ 1,916,209	\$ 14,734,048	\$ 17,465,484	\$ 40,057,194
Fiscal Year 2019 (ARC)					
Percent of Payroll	1.03%	0.28%	1.23%	3.91%	1.38%
Estimated Dollars	\$ 6,164,257	\$ 1,988,066	\$ 15,286,575	\$ 18,120,439	\$ 41,559,337

Accrued Medical Subsidy Liabilities, \$714,103,416 were more than applicable assets of \$21,245,899.

The calculations above show the estimated employer's Annual Required Contribution (ARC) for the years ended June 30, 2018 and June 30, 2019.

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

**Determination of Unfunded Actuarial Accrued Liability (Medical)
as of June 30, 2014**

	State Employees	Political Subdivision Employees	Teachers	Police & Fire	Total
A. Present Value of Future Medical Benefits					
1. Retirees and Beneficiaries	\$ 78,172,594	\$ 65,505,566	\$ 238,681,526	\$ 184,548,072	\$ 566,907,758
2. Vested Terminated Members	-	-	-	-	-
3. Active Members	-	-	-	163,593,435	163,593,435
Total Present Value of Future Medical Benefits	78,172,594	65,505,566	238,681,526	348,141,507	730,501,193
B. Present Value of Future Employer Normal Costs	-	-	-	16,397,777	16,397,777
C. Present Value of Future Contributions from Current Active Members	-	-	-	-	-
D. Actuarial Medical Accrued Liability (A.-B.-C.)	78,172,594	65,505,566	238,681,526	331,743,730	714,103,416
E. 401(h) Subtrust Actuarial Value of Assets	325,198	22,767,078	(11,247,536)	9,401,159	21,245,899
F. Unfunded Actuarial Accrued Liability (D.-E.)	\$ 77,847,396	\$ 42,738,488	\$ 249,929,062	\$ 322,342,571	\$ 692,857,517

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, 2014
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Equivalent Single Amortization Period	16 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 22-year amortization or the amount necessary to meet cash flow.

NHRS - 401(h) Cash Flow Projections

June 30, 2014

State Employees

Year Ending	Valuation Pay	Employer Contributions			Benefits Paid	Solvency Assets
		Rate -- Total	Rate -- Health	Dollars -- Health		
6/30/2014	\$ 497,855,151					\$ 358,689
6/30/2015	516,524,719	12.13%	1.62%	\$ 8,367,700	\$8,623,690	120,578
6/30/2016	535,894,396	12.50%	1.64%	8,788,668	7,936,159	1,015,466
6/30/2017	555,990,436	12.50%	1.64%	9,118,243	7,506,999	2,767,844
6/30/2018	576,840,077	11.37%	1.03%	5,941,453	7,100,778	1,778,103
6/30/2019	598,471,580	11.37%	1.03%	6,164,257	6,705,470	1,353,721
6/30/2020	620,914,264	11.36%	1.02%	6,321,617	6,321,617	
6/30/2021	644,198,549	11.26%	0.92%	5,951,412	5,951,412	
6/30/2022	668,355,995	11.18%	0.84%	5,586,571	5,586,571	
6/30/2023	693,419,345	11.09%	0.75%	5,226,600	5,226,600	
6/30/2024	719,422,570	11.02%	0.68%	4,864,245	4,864,245	
6/30/2025	746,400,916	10.94%	0.60%	4,505,933	4,505,933	
6/30/2026	774,390,950	10.88%	0.54%	4,154,516	4,154,516	
6/30/2027	803,430,611	10.81%	0.47%	3,808,400	3,808,400	
6/30/2028	833,559,259	10.76%	0.42%	3,477,700	3,477,700	
6/30/2029	864,817,731	10.71%	0.37%	3,159,746	3,159,746	
6/30/2030	897,248,396	10.66%	0.32%	2,859,129	2,859,129	
6/30/2031	930,895,211	10.62%	0.28%	2,566,460	2,566,460	
6/30/2032	965,803,781	10.58%	0.24%	2,286,409	2,286,409	
6/30/2033	1,002,021,423	10.54%	0.20%	2,027,196	2,027,196	
6/30/2034	1,039,597,226	10.51%	0.17%	1,785,806	1,785,806	
6/30/2035	1,078,582,122	10.48%	0.14%	1,562,780	1,562,780	
6/30/2036	1,119,028,952	10.46%	0.12%	1,358,599	1,358,599	
6/30/2037	1,160,992,538	10.44%	0.10%	1,173,663	1,173,663	
6/30/2038	1,204,529,758	10.42%	0.08%	1,008,139	1,008,139	

NHRS - 401(h) Cash Flow Projections
June 30, 2014

Political Subdivision Employees

<u>Year Ending</u>	<u>Valuation Pay</u>	<u>Employer Contribution</u>			<u>Benefits Paid</u>	<u>Solvency Assets</u>
		<u>Rate -- Total</u>	<u>Rate -- Health</u>	<u>Dollars -- Health</u>		
6/30/2014	\$ 590,652,908					\$ 25,111,806
6/30/2015	612,802,392	10.77%	0.33%	\$ 2,022,248	\$6,140,951	22,779,669
6/30/2016	635,782,482	11.17%	0.31%	1,970,926	5,923,455	20,439,403
6/30/2017	659,624,325	11.17%	0.31%	2,044,835	5,717,781	18,208,184
6/30/2018	684,360,237	10.62%	0.28%	1,916,209	5,509,784	15,886,492
6/30/2019	710,023,746	10.62%	0.28%	1,988,066	5,300,771	13,676,624
6/30/2020	736,649,636	10.62%	0.28%	2,062,619	5,104,681	
6/30/2021	764,273,997	10.62%	0.28%	2,139,967	4,880,776	
6/30/2022	792,934,272	10.62%	0.28%	2,220,216	4,655,229	
6/30/2023	822,669,307	10.62%	0.28%	2,303,474	4,430,175	
6/30/2024	853,519,406	10.62%	0.28%	2,389,854	4,201,237	
6/30/2025	885,526,384	10.62%	0.28%	2,479,474	3,963,370	
6/30/2026	918,733,623	10.62%	0.28%	2,572,454	3,730,613	
6/30/2027	953,186,134	10.62%	0.28%	2,668,921	3,497,310	
6/30/2028	988,930,614	10.62%	0.28%	2,769,006	3,257,632	
6/30/2029	1,026,015,512	10.62%	0.28%	2,872,843	3,015,494	
6/30/2030	1,064,491,094	10.60%	0.26%	2,776,126	2,776,126	
6/30/2031	1,104,409,510	10.57%	0.23%	2,540,730	2,540,730	
6/30/2032	1,145,824,867	10.54%	0.20%	2,308,734	2,308,734	
6/30/2033	1,188,793,300	10.52%	0.18%	2,083,940	2,083,940	
6/30/2034	1,233,373,049	10.49%	0.15%	1,866,577	1,866,577	
6/30/2035	1,279,624,538	10.47%	0.13%	1,658,316	1,658,316	
6/30/2036	1,327,610,458	10.45%	0.11%	1,460,770	1,460,770	
6/30/2037	1,377,395,850	10.43%	0.09%	1,275,431	1,275,431	
6/30/2038	1,429,048,194	10.42%	0.08%	1,103,583	1,103,583	

NHRS - 401(h) Cash Flow Projections June 30, 2014

Teachers

<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>		
6/30/2014	\$1,033,866,735					\$ (12,405,894)
6/30/2015	1,072,636,738	14.16%	2.20%	\$ 23,598,008	\$22,367,055	(12,088,698)
6/30/2016	1,112,860,616	15.67%	2.95%	32,829,388	21,351,487	(1,102,903)
6/30/2017	1,154,592,889	15.67%	2.95%	34,060,490	20,365,694	13,037,091
6/30/2018	1,197,890,122	13.32%	1.23%	14,734,049	19,485,457	9,111,941
6/30/2019	1,242,811,002	13.32%	1.23%	15,286,575	18,736,615	6,234,387
6/30/2020	1,289,416,415	13.32%	1.23%	15,859,822	18,027,863	
6/30/2021	1,337,769,531	13.32%	1.23%	16,454,565	17,338,633	
6/30/2022	1,387,935,888	13.29%	1.20%	16,642,264	16,642,264	
6/30/2023	1,439,983,484	13.20%	1.11%	15,928,796	15,928,796	
6/30/2024	1,493,982,865	13.11%	1.02%	15,198,343	15,198,343	
6/30/2025	1,550,007,222	13.02%	0.93%	14,446,614	14,446,614	
6/30/2026	1,608,132,493	12.94%	0.85%	13,675,638	13,675,638	
6/30/2027	1,668,437,461	12.86%	0.77%	12,890,307	12,890,307	
6/30/2028	1,731,003,866	12.79%	0.70%	12,091,233	12,091,233	
6/30/2029	1,795,916,511	12.72%	0.63%	11,282,434	11,282,434	
6/30/2030	1,863,263,380	12.65%	0.56%	10,467,933	10,467,933	
6/30/2031	1,933,135,757	12.59%	0.50%	9,653,902	9,653,902	
6/30/2032	2,005,628,348	12.53%	0.44%	8,844,105	8,844,105	
6/30/2033	2,080,839,411	12.48%	0.39%	8,044,036	8,044,036	
6/30/2034	2,158,870,889	12.43%	0.34%	7,259,551	7,259,551	
6/30/2035	2,239,828,547	12.38%	0.29%	6,496,742	6,496,742	
6/30/2036	2,323,822,118	12.34%	0.25%	5,761,850	5,761,850	
6/30/2037	2,410,965,447	12.30%	0.21%	5,061,373	5,061,373	
6/30/2038	2,501,376,651	12.27%	0.18%	4,405,874	4,405,874	

NHRS - 401(h) Cash Flow Projections
June 30, 2014

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>		
6/30/2014	\$ 385,524,015					\$ 10,369,363
6/30/2015	399,981,166	N/A	3.95%	\$ 15,799,256	\$16,554,876	10,388,089
6/30/2016	414,980,460	N/A	3.84%	15,935,250	17,470,170	9,598,767
6/30/2017	430,542,227	N/A	3.84%	16,532,822	18,249,672	8,559,294
6/30/2018	446,687,561	N/A	3.91%	17,465,484	18,912,672	7,719,373
6/30/2019	463,438,345	N/A	3.91%	18,120,439	19,600,339	6,780,379
6/30/2020	480,817,283	N/A	3.91%	18,799,956	20,236,074	
6/30/2021	498,847,931	N/A	3.91%	19,504,954	20,753,078	
6/30/2022	517,554,728	N/A	3.91%	20,236,390	21,085,336	
6/30/2023	536,963,030	N/A	3.91%	20,995,254	21,263,728	
6/30/2024	557,099,144	N/A	3.82%	21,263,334	21,263,334	
6/30/2025	577,990,362	N/A	3.66%	21,148,280	21,148,280	
6/30/2026	599,665,001	N/A	3.48%	20,871,582	20,871,582	
6/30/2027	622,152,439	N/A	3.30%	20,540,015	20,540,015	
6/30/2028	645,483,155	N/A	3.12%	20,135,523	20,135,523	
6/30/2029	669,688,773	N/A	2.93%	19,635,833	19,635,833	
6/30/2030	694,802,102	N/A	2.75%	19,078,445	19,078,445	
6/30/2031	720,857,181	N/A	2.56%	18,462,078	18,462,078	
6/30/2032	747,889,325	N/A	2.38%	17,791,039	17,791,039	
6/30/2033	775,935,175	N/A	2.20%	17,083,897	17,083,897	
6/30/2034	805,032,744	N/A	2.03%	16,336,973	16,336,973	
6/30/2035	835,221,472	N/A	1.86%	15,574,308	15,574,308	
6/30/2036	866,542,277	N/A	1.71%	14,796,513	14,796,513	
6/30/2037	899,037,612	N/A	1.56%	14,017,309	14,017,309	
6/30/2038	932,751,522	N/A	1.42%	13,249,461	13,249,461	

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
2014	2,105	42,200	780	12,676	31,054	602,669	0.66%	19,407

* 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
45 - 49	6	\$ 57,477	\$ 9,580	7	\$ 73,751	\$ 10,536
50 - 54	58	940,250	16,211	64	786,891	12,295
55 - 59	221	4,516,688	20,438	332	4,964,329	14,953
60 - 64	972	20,276,817	20,861	1,328	19,998,337	15,059
65 - 69	1,494	24,965,935	16,711	2,084	24,766,367	11,884
70 - 74	1,120	15,968,266	14,257	1,583	16,132,603	10,191
75 - 79	802	10,497,715	13,089	916	8,027,981	8,764
80 - 84	500	6,495,808	12,992	614	5,126,351	8,349
85 - 89	296	3,347,788	11,310	379	3,095,460	8,167
90 - 94	98	1,103,410	11,259	150	1,030,333	6,869
95 - 99	21	138,432	6,592	29	185,353	6,391
100 & Over	2	9,307	4,654	6	40,823	6,804
TOTAL	5,590	\$ 88,317,893	\$ 15,799	7,492	\$ 84,228,579	\$ 11,242

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
30 - 34				1	\$ 21,492	\$ 21,492
35 - 39				5	63,850	12,770
40 - 44	5	\$ 76,975	\$ 15,395	4	54,934	13,734
45 - 49	26	369,940	14,228	22	282,141	12,825
50 - 54	49	756,209	15,433	53	655,585	12,370
55 - 59	69	969,832	14,056	88	1,086,455	12,346
60 - 64	95	1,329,502	13,995	117	1,486,074	12,701
65 - 69	80	1,083,284	13,541	90	1,055,171	11,724
70 - 74	52	758,485	14,586	58	678,819	11,704
75 - 79	25	297,377	11,895	19	235,846	12,413
80 - 84	12	175,810	14,651	10	151,580	15,158
85 - 89	2	23,256	11,628	5	52,059	10,412
90 - 94				2	30,172	15,086
95 - 99				1	13,746	13,746
100 & Over						
TOTAL	415	\$ 5,840,670	\$ 14,074	475	\$ 5,867,924	\$ 12,354

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	2	\$ 6,839	\$ 3,420
20 - 24	1	3,603	3,603	2	3,548	1,774
25 - 29	1	1,921	1,921			
30 - 34	4	12,078	3,020	2	6,946	3,473
35 - 39	3	25,923	8,641	5	29,103	5,821
40 - 44	2	6,109	3,055	10	41,632	4,163
45 - 49	8	25,412	3,177	12	91,520	7,627
50 - 54	10	46,519	4,652	28	194,860	6,959
55 - 59	16	92,076	5,755	46	609,478	13,250
60 - 64	37	206,493	5,581	94	1,129,019	12,011
65 - 69	26	183,979	7,076	125	1,495,064	11,961
70 - 74	21	134,111	6,386	155	1,926,331	12,428
75 - 79	33	250,588	7,594	196	2,301,573	11,743
80 - 84	26	176,526	6,789	202	2,465,779	12,207
85 - 89	17	134,426	7,907	154	1,381,022	8,968
90 - 94	5	27,086	5,417	78	657,058	8,424
95 - 99	1	1,584	1,584	15	76,735	5,116
100 & Over				4	43,335	10,834
TOTAL	212	\$ 1,330,208	\$ 6,275	1,130	\$ 12,459,842	\$ 11,026

Retirees and Beneficiaries Age Distribution Teachers

SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
45 - 49				5	\$ 54,300	\$ 10,860
50 - 54	14	\$ 228,602	\$ 16,329	36	398,328	11,065
55 - 59	81	1,919,644	23,699	281	5,796,591	20,628
60 - 64	600	16,165,690	26,943	1,752	40,701,266	23,231
65 - 69	1,030	24,980,963	24,253	2,532	52,181,615	20,609
70 - 74	612	14,257,400	23,296	1,232	23,472,171	19,052
75 - 79	335	8,421,234	25,138	698	13,466,352	19,293
80 - 84	205	4,930,322	24,050	377	7,251,363	19,234
85 - 89	83	1,717,687	20,695	207	3,557,969	17,188
90 - 94	19	261,797	13,779	120	1,770,252	14,752
95 - 99	5	78,985	15,797	49	616,569	12,583
100 & Over				11	128,337	11,667
TOTAL	2,984	\$ 72,962,324	\$ 24,451	7,300	\$ 149,395,113	\$ 20,465

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
35 - 39				1	\$ 12,356	\$ 12,356
40 - 44	2	\$ 33,375	\$ 16,688	1	9,668	9,668
45 - 49				3	38,279	12,760
50 - 54	2	40,870	20,435	10	143,159	14,316
55 - 59	3	46,471	15,490	23	462,727	20,119
60 - 64	8	117,214	14,652	28	470,304	16,797
65 - 69	6	142,894	23,816	27	438,365	16,236
70 - 74	12	247,222	20,602	20	348,136	17,407
75 - 79	4	80,584	20,146	13	211,953	16,304
80 - 84	6	106,889	17,815	6	106,569	17,762
85 - 89	2	26,132	13,066	4	50,520	12,630
90 - 94	1	10,171	10,171	3	37,196	12,399
95 - 99				2	26,654	13,327
100 & Over						
TOTAL	46	\$ 851,822	\$ 18,518	141	\$ 2,355,886	\$ 16,708

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	9,670	9,670
35 - 39	4	47,149	11,787	3	11,141	3,714
40 - 44	3	22,547	7,516	2	22,002	11,001
45 - 49	6	48,532	8,089	4	32,368	8,092
50 - 54	12	100,176	8,348	3	31,229	10,410
55 - 59	6	76,348	12,725	16	272,603	17,038
60 - 64	16	218,355	13,647	33	516,347	15,647
65 - 69	40	673,160	16,829	54	1,207,531	22,362
70 - 74	32	464,088	14,503	61	1,504,299	24,661
75 - 79	25	425,600	17,024	52	1,251,696	24,071
80 - 84	18	317,345	17,630	45	1,061,892	23,598
85 - 89	6	76,400	12,733	23	385,798	16,774
90 - 94	4	71,390	17,848	17	154,547	9,091
95 - 99				6	77,479	12,913
100 & Over						
TOTAL	173	\$2,545,831	\$14,716	321	\$6,551,784	\$20,411

Retirees and Beneficiaries Age Distribution Police

SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
40 - 44				10	\$ 135,917	\$ 13,592
45 - 49	184	\$ 9,155,059	\$ 49,756	38	1,025,325	26,982
50 - 54	372	18,834,572	50,631	69	1,977,142	28,654
55 - 59	402	19,817,386	49,297	71	1,594,235	22,454
60 - 64	371	15,600,704	42,050	68	1,590,763	23,394
65 - 69	346	12,531,941	36,219	53	934,916	17,640
70 - 74	220	6,683,517	30,380	38	595,809	15,679
75 - 79	129	3,667,475	28,430	15	236,160	15,744
80 - 84	65	1,497,992	23,046	10	153,802	15,380
85 - 89	26	736,373	28,322	5	83,590	16,718
90 - 94	4	129,545	32,386			
95 - 99	1	47,166	47,166	1	5,901	5,901
100 & Over	1	12,280	12,280			
TOTAL	2,121	\$ 88,714,010	\$ 41,827	378	\$ 8,333,560	\$ 22,046

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
25 - 29				1	\$ 9,349	\$ 9,349
30 - 34	4	\$ 126,932	\$ 31,733	1	40,235	40,235
35 - 39	7	252,102	36,015	2	61,242	30,621
40 - 44	16	617,870	38,617	2	84,073	42,037
45 - 49	36	1,378,744	38,298	7	206,198	29,457
50 - 54	43	1,376,007	32,000	6	210,179	35,030
55 - 59	46	1,612,989	35,065	11	314,880	28,625
60 - 64	44	1,312,043	29,819	8	205,771	25,721
65 - 69	49	1,507,909	30,774	11	284,751	25,886
70 - 74	35	1,061,146	30,318	2	35,972	17,986
75 - 79	13	360,857	27,758	1	12,357	12,357
80 - 84	11	293,612	26,692	1	21,995	21,995
85 - 89	2	40,101	20,051			
90 - 94	1	12,255	12,255			
95 - 99	1	12,126	12,126			
100 & Over						
TOTAL	308	\$ 9,964,693	\$ 32,353	53	\$ 1,487,002	\$ 28,057

Retirees and Beneficiaries Age Distribution Police

BENEFICIARIES OF DECEASED MEMBERS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
Under 20	1	\$ 30,418	\$ 30,418			
20 - 24	2	21,642	10,821			
25 - 29	1	11,314	11,314			
30 - 34				1	\$ 11,314	\$ 11,314
40 - 44	1	3,991	3,991	5	81,409	16,282
45 - 49	3	49,397	16,466	6	181,917	30,320
50 - 54	2	16,824	8,412	17	427,325	25,137
55 - 59	5	113,887	22,777	28	628,554	22,448
60 - 64	3	35,955	11,985	29	452,227	15,594
65 - 69	4	49,789	12,447	52	1,224,437	23,547
70 - 74	2	34,094	17,047	71	1,133,715	15,968
75 - 79	4	23,669	5,917	65	845,491	13,008
80 - 84	5	22,356	4,471	43	620,482	14,430
85 - 89	4	39,709	9,927	49	563,847	11,507
90 - 94				11	158,677	14,425
95 - 99	1	12,498	12,498	7	79,595	11,371
100 & Over						
TOTAL	38	\$ 465,543	\$ 12,251	384	\$ 6,408,990	\$ 16,690

Retirees and Beneficiaries Age Distribution Fire

SERVICE RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
40 - 44				2	\$ 5,889	\$ 2,945
45 - 49	56	\$ 2,739,303	\$48,916	7	118,582	16,940
50 - 54	117	6,419,483	54,867	26	438,467	16,864
55 - 59	205	10,503,734	51,238	21	297,978	14,189
60 - 64	248	11,759,673	47,418	23	353,010	15,348
65 - 69	144	5,667,424	39,357	9	175,285	19,476
70 - 74	93	3,553,597	38,211	3	31,286	10,429
75 - 79	65	2,091,298	32,174	4	52,348	13,087
80 - 84	39	1,004,647	25,760			
85 - 89	21	549,561	26,170	1	25,849	25,849
90 - 94	8	226,724	28,341			
95 - 99	1	14,896	14,896			
100 & Over						
TOTAL	997	\$44,530,340	\$44,664	96	\$1,498,694	\$15,611

DISABILITY RETIREMENTS

Age Group	Males			Females		
	Number	Amount	Average	Number	Amount	Average
25 - 29	1	\$ 19,303	\$ 19,303			
35 - 39	1	13,194	13,194			
40 - 44	3	104,854	34,951			
45 - 49	5	189,472	37,894			
50 - 54	18	587,044	32,614	3	\$ 108,530	\$ 36,177
55 - 59	16	589,768	36,861	1	26,454	26,454
60 - 64	19	590,443	31,076			
65 - 69	10	288,454	28,845			
70 - 74	20	536,299	26,815			
75 - 79	14	354,646	25,332			
80 - 84	7	194,334	27,762			
85 - 89	3	95,464	31,821			
90 - 94	1	3,039	3,039			
95 - 99	1	18,993	18,993			
100 & Over						
TOTAL	119	\$3,585,307	\$30,129	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
40 - 44	2	26,396	13,198	1	44,756	44,756
45 - 49	2	17,630	8,815	1	36,078	36,078
50 - 54				9	159,196	17,688
55 - 59	2	5,593	2,797	26	468,192	18,007
60 - 64				27	511,834	18,957
65 - 69				35	789,046	22,544
70 - 74				32	507,446	15,858
75 - 79	1	15,853	15,853	35	654,260	18,693
80 - 84				33	576,856	17,480
85 - 89	2	38,479	19,240	40	615,569	15,389
90 - 94				22	291,328	13,242
95 - 99				4	61,573	15,393
100 & Over						
TOTAL	11	\$115,777	\$10,525	266	\$4,722,047	\$17,752

Active Members by Valuation Division

Valuation Group	Active Members	Valuation Payroll	Average		
			Age	Service	Pay
Employees:					
Male	9,487	\$ 475,868,552	49.0	11.7	\$50,160
Female	15,058	612,639,507	49.4	11.0	40,685
Total	24,545	1,088,508,059	49.2	11.2	44,347
Teachers:					
Male	3,922	238,671,697	45.9	13.9	60,855
Female	14,064	795,195,038	46.5	13.3	56,541
Total	17,986	1,033,866,735	46.3	13.4	57,482
Police:					
Male	3,620	240,326,513	39.4	11.4	66,389
Female	546	30,170,502	38.7	8.9	55,257
Total	4,166	270,497,015	39.3	11.1	64,930
Fire:					
Male	1,564	112,099,325	41.5	13.4	71,675
Female	46	2,927,675	41.3	11.7	63,645
Total	1,610	115,027,000	41.5	13.3	71,445
Total:					
Male	18,593	1,066,966,087	45.9	12.2	57,385
Female	29,714	1,440,932,722	47.8	12.0	48,493
Grand Total	48,307	\$2,507,898,809	47.1	12.1	\$51,916

Valuation Group	Active Members	Valuation Payroll
Employees:		
State	9,966	\$ 497,855,151
Political Subdivisions	14,579	590,652,908
Subtotal	24,545	1,088,508,059
Teachers:	17,986	1,033,866,735
Police:		
State	1,061	70,417,480
Political Subdivisions	3,105	200,079,535
Subtotal	4,166	270,497,015
Fire:		
State	68	3,778,708
Political Subdivisions	1,542	111,248,292
Subtotal	1,610	115,027,000
Total	48,307	\$ 2,507,898,809

Age and Service Distribution

Employees
June 30, 2014

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	16							16	\$ 327,176
20-24	459	6						465	12,621,934
25-29	964	257	7					1,228	40,721,198
30-34	815	615	184	6				1,620	63,440,025
35-39	652	516	410	124	3			1,705	73,360,254
40-44	758	689	536	338	115	7		2,443	110,402,154
45-49	878	859	660	411	299	216	24	3,347	150,795,702
50-54	980	1,055	985	543	387	366	170	4,486	204,282,513
55-59	760	1,021	1,043	651	468	396	368	4,707	216,446,722
60-64	419	708	686	503	341	281	266	3,204	154,354,188
65-69	109	243	265	175	113	97	85	1,087	51,703,674
70+	15	51	67	38	22	24	20	237	10,052,519
TOTAL	6,825	6,020	4,843	2,789	1,748	1,387	933	24,545	\$ 1,088,508,059

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

Age: 49.2 years
Service: 11.2 years
Annual Pay: \$44,347

Age and Service Distribution

Teachers
June 30, 2014

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									\$ -
20-24	144	1						145	5,094,363
25-29	1,006	267						1,273	51,201,818
30-34	634	1,204	195					2,033	94,951,815
35-39	394	716	1,005	117				2,232	120,169,464
40-44	388	513	695	624	78	3		2,301	133,369,558
45-49	303	532	524	471	327	106	3	2,266	134,247,847
50-54	193	460	595	371	303	411	97	2,430	148,236,573
55-59	137	298	527	497	303	397	488	2,647	168,043,931
60-64	72	189	329	400	315	292	488	2,085	139,321,830
65-69	11	50	83	104	78	71	111	508	34,628,047
70+	1	10	13	8	6	9	19	66	4,601,489
TOTAL	3,283	4,240	3,966	2,592	1,410	1,289	1,206	17,986	\$ 1,033,866,735

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

Age: 46.3 years
Service: 13.4 years
Annual Pay: \$57,482

Age and Service Distribution

Police
June 30, 2014

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	4							4	\$ 133,901
20-24	189	1						190	7,053,798
25-29	457	137	1					595	30,618,140
30-34	197	357	99	1				654	39,612,571
35-39	92	190	320	79				681	45,966,746
40-44	57	118	228	307	91	1		802	58,205,592
45-49	39	57	119	129	164	63	4	575	42,495,288
50-54	40	50	66	49	73	63	23	364	26,238,706
55-59	16	29	45	37	33	21	20	201	13,630,307
60-64	7	12	18	10	10	11	5	73	4,639,267
65-69	2	4	4	5	5	2	3	25	1,683,669
70+					1		1	2	219,030
TOTAL	1,100	955	900	617	377	161	56	4,166	\$270,497,015

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: 11.1 years
Annual Pay: \$64,930

Age and Service Distribution

Fire
June 30, 2014

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									\$ -
20-24	40							40	1,871,155
25-29	104	66						170	9,139,409
30-34	49	117	48	1				215	13,556,576
35-39	22	62	111	32				227	15,729,961
40-44	11	51	109	86	39	1		297	21,477,322
45-49	13	34	102	66	79	49	1	344	26,696,862
50-54	5	16	30	33	27	60	17	188	15,569,175
55-59	3	4	17	14	11	19	20	88	7,406,670
60-64	4	1	5	4	3	6	11	34	2,975,062
65-69	1	1	1				2	5	388,259
70+						1	1	2	216,549
TOTAL	252	352	423	236	159	136	52	1,610	\$ 115,027,000

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

Age: 41.5 years
Service: 13.3 years
Annual Pay: \$71,445

Age and Service Distribution

Total
June 30, 2014

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	20							20	\$ 461,077
20-24	832	8						840	26,641,250
25-29	2,531	727	8					3,266	131,680,565
30-34	1,695	2,293	526	8				4,522	211,560,987
35-39	1,160	1,484	1,846	352	3			4,845	255,226,425
40-44	1,214	1,371	1,568	1,355	323	12		5,843	323,454,626
45-49	1,233	1,482	1,405	1,077	869	434	32	6,532	354,235,699
50-54	1,218	1,581	1,676	996	790	900	307	7,468	394,326,967
55-59	916	1,352	1,632	1,199	815	833	896	7,643	405,527,630
60-64	502	910	1,038	917	669	590	770	5,396	301,290,347
65-69	123	298	353	284	196	170	201	1,625	88,403,649
70+	16	61	80	46	29	34	41	307	15,089,587
TOTAL	11,460	11,567	10,132	6,234	3,694	2,973	2,247	48,307	\$ 2,507,898,809

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

Age: 47.1 years
Service: 12.1 years
Annual Pay: \$51,916

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
2014	48,307	(0.4%)	2,507,898,809	0.2%	51,916	1.0%	47.1	12.1

* Average annual increase.

By Valuation Group (Valuation Payroll in Thousands)

	Fiscal Year	Active Members#	Valuation Payroll	Average Compensation	% Inc.*
Employees	2014	24,545	\$1,088,508	\$44,347	1.94 %
Teachers		17,986	1,033,867	57,482	(0.04)%
Police		4,166	270,497	64,930	1.91 %
Fire		1,610	115,027	71,445	(0.78)%
Total		48,307	\$2,507,899	\$51,916	1.04 %

	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 %

Excludes temporary inactive members.

* Average annual increase.

Summary of Membership Data by Category

	June 30	
	2014	2013
Active Members		
Number	48,307	48,688
Average age (years)	47.1	47.0
Average service (years)	12.1	12.0
Average salary	\$51,916	\$51,383
Total payroll supplied, annualized	\$ 2,507,898,809	\$ 2,501,741,708
Vested Inactive Members		
Number	1,297	1,261
Average age (years)	52	52
Non-Vested Inactive Members		
Number	8,102	7,273
Service Retirees		
Number	26,958	25,785
Average age (years)	69	69
Total annual benefits	\$ 537,980,513	\$ 511,111,807
Average annual benefit	\$ 19,956	\$ 19,822
Disability Retirees		
Number	1,561	1,558
Average age (years)	62	62
Total annual benefits	\$ 30,088,288	\$ 29,774,641
Average annual benefit	\$ 19,275	\$ 19,111
Beneficiaries		
Number	2,535	2,386
Average age (years)	73	73
Total annual benefits	\$ 34,600,022	\$ 32,258,707
Average annual benefit	\$ 13,649	\$ 13,520
Total Covered Lives	88,760	86,951

SECTION F

OTHER GASB SCHEDULES OF INTEREST

Other Schedules of Interest

Distribution of Retirees by Years of Service

Service	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>		
Total annual benefit	\$ 3,880,171	\$ -	\$ 7,512,846	\$ 27,181,025	\$ 25,550,611	\$ 35,393,309	\$ 27,747,834	\$ 70,779,320	\$ 198,045,116
Average annual benefit	\$ 3,911	\$ -	\$ 5,019	\$ 7,088	\$ 10,532	\$ 13,902	\$ 18,812	\$ 27,833	\$ 12,932
Average monthly benefit	\$ 326	\$ -	\$ 418	\$ 591	\$ 878	\$ 1,158	\$ 1,568	\$ 2,319	\$ 1,078
Average final average salary	\$ 35,623	\$ -	\$ 40,017	\$ 41,061	\$ 46,293	\$ 48,678	\$ 55,009	\$ 64,041	\$ 48,488
Number of retired members	992 *	1,497	3,835	2,426	2,546	1,475	2,543		15,314 **

* Includes 192 members who did not have service reported.

** Includes 7,334 members who did not have FAS 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>		
Total annual benefit	\$ 1,309,792	\$ -	\$ 1,839,936	\$ 11,298,201	\$ 16,102,975	\$ 37,217,755	\$ 42,439,380	\$ 124,454,721	\$ 234,662,760
Average annual benefit	\$ 5,480	\$ -	\$ 6,367	\$ 8,419	\$ 12,976	\$ 17,506	\$ 22,467	\$ 32,419	\$ 21,401
Average monthly benefit	\$ 457	\$ -	\$ 531	\$ 702	\$ 1,081	\$ 1,459	\$ 1,872	\$ 2,702	\$ 1,783
Average final average salary	\$ 51,979	\$ -	\$ 56,039	\$ 48,107	\$ 57,182	\$ 61,325	\$ 66,117	\$ 71,311	\$ 63,299
Number of retired members	239 *	289	1,342	1,241	2,126	1,889	3,839		10,965 **

* Includes 100 members who did not have service reported.

** Includes 4,974 members who did not have FAS reported.

Service	Police							<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>		
Total annual benefit	\$ 3,443,271	\$ -	\$ 2,648,720	\$ 6,470,406	\$ 6,840,497	\$ 49,194,505	\$ 31,460,277	\$ 15,316,122	\$ 115,373,798
Average annual benefit	\$ 12,039	\$ -	\$ 16,555	\$ 18,226	\$ 25,335	\$ 35,571	\$ 52,347	\$ 67,472	\$ 35,154
Average monthly benefit	\$ 1,003	\$ -	\$ 1,380	\$ 1,519	\$ 2,111	\$ 2,964	\$ 4,362	\$ 5,623	\$ 2,929
Average final average salary	\$ 42,303	\$ -	\$ 51,636	\$ 49,456	\$ 60,358	\$ 76,729	\$ 90,857	\$ 99,377	\$ 77,381
Number of retired members	286 *	160	355	270	1,383	601	227		3,282 **

* Includes 190 members who did not have service reported.

** Includes 1,816 members who did not have FAS reported.

Service	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>		
Total annual benefit	\$ 1,639,930	\$ -	\$ 504,748	\$ 1,799,692	\$ 2,862,090	\$ 18,994,569	\$ 18,368,850	\$ 10,417,270	\$ 54,587,149
Average annual benefit	\$ 12,812	\$ -	\$ 17,405	\$ 20,686	\$ 24,051	\$ 32,249	\$ 47,960	\$ 65,932	\$ 36,562
Average monthly benefit	\$ 1,068	\$ -	\$ 1,450	\$ 1,724	\$ 2,004	\$ 2,687	\$ 3,997	\$ 5,494	\$ 3,047
Average final average salary	\$ 45,602	\$ -	\$ 64,928	\$ 56,150	\$ 65,849	\$ 75,732	\$ 89,221	\$ 93,573	\$ 81,886
Number of retired members	128 *	29	87	119	589	383	158		1,493 **

* Includes 106 members who did not have service reported.

** Includes 958 members who did not have FAS reported.

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

Employees

June 30, 2014																			
		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	4,622	3,772	43	2	10	-	536	259	2,736	164	319	76	850	201	12	5	-	-	259
501 - 1,000	4,660	3,550	253	128	7	2	398	322	2,590	115	308	99	912	299	11	4	-	-	322
1,001 - 1,500	2,734	2,183	81	226	9	4	148	83	1,408	84	226	86	606	236	4	1	-	-	83
1,501 - 2,000	1,580	1,338	24	89	4	2	91	32	735	41	149	62	413	140	5	3	-	-	32
2,001 - 2,500	933	846	3	24	-	2	54	4	392	13	96	41	299	85	1	2	-	-	4
2,501 - 3,000	579	527	3	7	2	1	37	2	220	14	78	26	163	75	1	-	-	-	2
3,001 - 3,500	353	329	-	3	-	-	19	2	129	7	51	17	109	38	-	-	-	-	2
3,501 - 4,000	261	250	1	1	-	-	9	-	84	3	39	20	82	32	1	-	-	-	-
Over 4,000	296	287	1	1	1	-	6	-	79	4	46	29	97	39	1	1	-	-	-
Totals	16,018	13,082	409	481	33	11	1,298	704	8,373	445	1,312	456	3,531	1,145	36	16	-	-	704

Teachers

June 30, 2014																			
		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	1,328	1,113	-	-	-	-	67	148	610	39	89	31	316	84	6	5	-	-	148
501 - 1,000	1,867	1,441	44	-	1	-	113	268	963	84	95	27	341	82	6	1	-	-	268
1,001 - 1,500	1,604	1,355	69	4	5	-	86	85	789	56	119	45	390	116	3	1	-	-	85
1,501 - 2,000	1,665	1,537	27	6	5	-	66	24	750	53	130	45	487	169	1	6	-	-	24
2,001 - 2,500	1,667	1,583	16	8	-	1	54	5	719	38	127	64	508	200	2	4	-	-	5
2,501 - 3,000	1,338	1,291	8	2	-	-	37	-	547	42	124	48	403	167	2	5	-	-	-
3,001 - 3,500	1,062	1,026	2	1	-	-	33	-	450	23	94	40	336	112	3	4	-	-	-
3,501 - 4,000	560	543	-	-	2	-	14	1	229	19	58	21	157	75	-	-	-	-	1
Over 4,000	405	395	-	-	-	-	10	-	171	6	44	14	119	51	-	-	-	-	-
Totals	11,496	10,284	166	21	13	1	480	531	5,228	360	880	335	3,057	1,056	23	26	-	-	531

See Page 71 for footnotes.

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

Police

June 30, 2014																			
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	170	127	1	-	-	2	40	-	121	1	6	16	6	20	-	-	-	-	-
501 - 1,000	306	159	7	1	-	-	131	8	230	5	14	11	15	22	1	-	-	-	8
1,001 - 1,500	333	161	20	8	-	1	118	25	215	12	15	11	16	39	-	-	-	-	25
1,501 - 2,000	304	184	24	34	2	1	47	12	176	14	8	25	15	53	1	-	-	-	12
2,001 - 2,500	365	262	11	63	-	1	21	7	180	18	12	49	18	81	-	-	-	-	7
2,501 - 3,000	387	274	-	82	1	2	25	3	157	20	9	66	19	113	-	-	-	-	3
3,001 - 3,500	337	284	1	42	1	3	6	-	118	16	4	92	8	99	-	-	-	-	-
3,501 - 4,000	277	248	-	20	1	-	8	-	91	8	1	62	9	106	-	-	-	-	-
Over 4,000	858	800	1	46	2	1	8	-	213	18	9	262	14	341	1	-	-	-	-
Totals	3,337	2,499	65	296	7	11	404	55	1,501	112	78	594	120	874	3	-	-	-	55

Fire

June 30, 2014																			
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	47	27	-	1	-	2	17	-	36	-	2	-	2	7	-	-	-	-	-
501 - 1,000	112	37	1	-	-	-	74	-	102	-	2	1	1	6	-	-	-	-	-
1,001 - 1,500	155	65	9	5	-	5	70	1	121	6	6	7	7	7	-	-	-	-	1
1,501 - 2,000	135	67	8	12	-	1	44	3	91	9	5	9	8	10	-	-	-	-	3
2,001 - 2,500	177	115	2	22	1	3	33	1	98	13	8	24	6	27	-	-	-	-	1
2,501 - 3,000	166	128	2	26	-	-	9	1	63	8	5	28	12	49	-	-	-	-	1
3,001 - 3,500	146	125	1	16	-	2	2	-	37	7	3	38	2	59	-	-	-	-	-
3,501 - 4,000	132	122	-	7	-	1	1	1	39	5	1	30	2	54	-	-	-	-	1
Over 4,000	430	407	-	11	1	-	11	-	109	12	2	109	4	192	1	1	-	-	-
Totals	1,500	1,093	23	100	2	14	261	7	696	60	34	246	44	411	1	1	-	-	7

See Page 71 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	\$ 5,269	\$ 5,274	\$ 4,760	\$ 4,861	\$ 4,212	\$ 4,395	\$ 4,477	\$ 4,470
Average monthly benefit	\$ 439	\$ 439	\$ 397	\$ 405	\$ 351	\$ 366	\$ 373	\$ 373
Annual Benefits	\$416,243	\$353,356	\$385,589	\$199,311	\$2,211,341	\$1,555,990	\$3,478,906	\$8,600,736
Number of retired members	79	67	81	41	525	354	777	1,924

* Includes 3 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	\$ 3,724	\$ 4,092	\$ 4,340	\$ 4,679	\$ 4,598	\$ 4,505	\$ 5,283	\$ 4,750
Average monthly benefit	\$ 310	\$ 341	\$ 362	\$ 390	\$ 383	\$ 375	\$ 440	\$ 396
Annual Benefits	\$52,132	\$28,644	\$43,404	\$18,717	\$2,813,725	\$1,383,078	\$1,896,501	\$6,236,201
Number of retired members	14	7	10	4	612	307	359	1,313

* 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	\$ 3,580	\$3,397	\$ 6,794	\$5,684	\$ 4,690	\$ 4,812	\$ 5,635	\$ 5,235
Average monthly benefit	\$ 298	\$ 283	\$ 566	\$ 474	\$ 391	\$ 401	\$ 470	\$ 436
Annual Benefits	\$42,954	\$10,191	\$20,382	\$5,684	\$4,652,955	\$4,566,115	\$13,586,048	\$22,884,329
Number of retired members	12	3	3	1	992	949	2,411	4,371

* Includes 10 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	\$ 5,173	\$ 5,094	\$ 5,585	\$ 5,147	\$ 6,119	\$ 6,566	\$ 6,319	\$ 6,098
Average monthly benefit	\$ 431	\$ 425	\$ 465	\$ 429	\$ 510	\$ 547	\$ 527	\$ 508
Annual Benefits	\$300,025	\$412,628	\$977,307	\$880,113	\$7,532,342	\$4,215,463	\$1,750,238	\$16,068,116
Number of retired members	58	81	175	171	1,231	642	277	2,635

* Includes 16 members who did not have service reported.

In addition, there are 2,987 retirees who are eligible for a deferred subsidy.

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

State Employees

June 30, 2014					
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	1,702	80	1,588	0	34
501-1,000	220	24	110	54	32
1,001-1,500	2	0	1	0	1
1,501-2,000	0	0	0	0	0
Over 2,000	0	0	0	0	0
Total	1,924	104	1,699	54	67

Political Subdivision Employees

June 30, 2014					
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	1,146	46	1,093	0	7
501-1,000	162	35	76	24	27
1,001-1,500	4	0	1	0	3
1,501-2,000	1	1	0	0	0
Over 2,000	0	0	0	0	0
Total	1,313	82	1,170	24	37

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

Teachers

		June 30, 2014			
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	3,491	214	3,237	1	39
501-1,000	794	142	264	118	270
1,001-1,500	58	8	26	7	17
1,501-2,000	28	4	0	23	1
Over 2,000	0	0	0	0	0
Total	4,371	368	3,527	149	327

Police and Fire

		June 30, 2014			
Monthly Benefit	No. of Retirees	1 Person		2 Person	
		Pre-65	Post-65	Pre-65	Post-65
\$1-\$500	1,575	432	1,116	15	12
501-1,000	1,036	131	224	663	18
1,001-1,500	19	3	0	10	6
1,501-2,000	5	0	0	5	0
Over 2,000	0	0	0	0	0
Total	2,635	566	1,340	693	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 22 years from the contribution effective date (Fiscal Year 2018).

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). NHRS maintains the historical information for determining compliance with IRC Section 401(h). A test for compliance with IRC Section 401(h) was outside the scope of this valuation.

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 Actuarial 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 2014 valuation are illustrative for the 2018-2019 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 22-year period beginning on July 1, 2018. 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, 2013 valuation effective from July 1, 2015 to June 30, 2017 would be contributed to the net pension assets. Actual contribution rates for the 2018-19 biennium will be based on the June 30, 2015 valuation.

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.

All actuarial assumptions are expectations of future experience, not market measures. Under RSA 100-A:14 IX, the Board of Trustees sets the actuarial assumptions after consulting with the actuary.

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:	454	x 1.00	455	x 1.00

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

Disabled pension mortality was based on 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	124	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

Retirement Ages	% of Active Members Retiring Within Next Year			
	Male		Female	
	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:	454	x 1.00	455	x 1.00

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

Disabled pension mortality was based on 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:	454	x 1.00	455	x 1.00

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

Disabled pension mortality was based on 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	454	x	0	454	x	0	455	x	0	455	x	0
	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:	454	x 1.00	455	x 1.00

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

Disabled pension mortality was based on 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					
20	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%				
25	0.01%	0.01%	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%	0.01%	0.01%				
35	0.02%	0.02%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%				
40	0.02%	0.02%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%				
45	0.03%	0.03%	0.03%	0.03%	0.02%	0.02%	0.02%	0.02%				
50	0.04%	0.04%	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%	0.06%	0.06%				
Ref	454	x	0.25	454	x	0.25	455	x	0.25	455	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. Assumed administrative expenses are added to the Normal Cost, and were 0.35% of payroll in the June 30, 2014 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 for 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.

<i>Normal Form of Benefit</i>	<p>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.</p> <p>Group I: The assumed normal form of benefit is a straight life benefit.</p> <p>Group II: The assumed normal form of benefit is straight life for single members and joint and 50% survivor for married members.</p>
<i>Pay Increase Timing</i>	<p>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.</p>
<i>Service Credit Accruals</i>	<p>It is assumed that members accrue one year of service credit per year.</p>
<i>Split Benefits</i>	<p>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.</p>
<i>Data Adjustments</i>	<p>For the June 30, 2014 valuation, new active member pays were annualized.</p> <p>The NHRS underwent a thorough review of the medical subsidy data. We used the data as submitted without further audit. For those members reported as eligible but not receiving, we assumed that members would commence benefits at age eligibility. Those members already age eligible but not receiving were excluded from the valuation.</p>
<i>Medical Subsidy</i>	<p>The solvency rates for the medical subsidy benefits were determined to provide an estimated margin of 20% of the benefits by June 30, 2018 and thereafter.</p> <p>A retired member's medical subsidy amount is provided by Plan staff. If the member is under the age of 65, the pre-65 subsidy amount used is the amount reported by Plan staff, and the post-65 subsidy amount is assumed to be at the post-65 rates shown on page 117.</p>
<i>IRC Section 415(b) and 401(a)(17)</i>	<p>For purposes of the valuation, the limitations under IRC Section 401(a)(17) and 415(b) were not reflected due to immateriality.</p>

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 (Continued)

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 (Continued)

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 (Concluded)

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, 2011) 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 (Continued)

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 (Continued)

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 (Continued)

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 (Continued)

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 (Concluded)

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

2014 Legislative Session

House Bill No. 1494:

This bill: (1) adds definitions of terms used in RSA 100-A and clarifies existing definitions; (2) revises the procedure for calculating the cost of purchasing credit for certain types of prior service; (3) clarifies the ability to earn service credit while on a salary continuance plan; (4) corrects an inconsistency in the statute regarding the approval date of the comprehensive annual financial report; (5) adds penalties for employers who fail to remit correct data in a timely manner; and (6) repeals obsolete 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.

History of Recent Changes in Plan Provisions (Continued)

- (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.

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.

History of Recent Changes in Plan Provisions (Continued)

- (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.
- (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 (Concluded)

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 Subsidy Plan Provisions

Subsidy benefits as of July 1, 2014 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 Subsidy 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 is 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.