



# NHRS

**New Hampshire Retirement System**  
A Component Unit Of The State Of New Hampshire

**Comprehensive Annual  
Financial Report  
For The Fiscal Year Ended  
June 30, 2016**





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NEW HAMPSHIRE RETIREMENT SYSTEM

# INTRODUCTORY SECTION

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[CLICK HERE TO RETURN TO TABLE OF CONTENTS](#)

**Cover Design and Layout:** Christine Basha, NHRS Public Information Office  
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**COMPREHENSIVE ANNUAL  
FINANCIAL REPORT  
FOR THE FISCAL YEAR ENDED  
JUNE 30, 2016**

A Component Unit of the State of New Hampshire

Prepared by  
New Hampshire Retirement System  
54 Regional Drive  
Concord, New Hampshire 03301-8507  
[www.nhrs.org](http://www.nhrs.org)

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## TABLE OF CONTENTS

### INTRODUCTORY SECTION

Letter From the Chair.....	6
Board of Trustees.....	8
Independent Investment Committee.....	9
Certificate of Achievement.....	10
Administrative Organization.....	11
Professional Managers, Advisors and Service Providers.....	12
Letter of Transmittal.....	13

### FINANCIAL SECTION

Independent Auditors' Report.....	18
Management's Discussion and Analysis – Required Supplementary Information (Unaudited).....	21
Basic Financial Statements:	
Combining Statements of Fiduciary Net Position – Pension and Other Postemployment Medical Plans (OPEB).....	26
Combining Statements of Changes in Fiduciary Net Position – Pension and Other Postemployment Medical Plans (OPEB).....	28
Notes to the Financial Statements.....	30
Required Supplementary Information (Unaudited):	
Combining Schedule of Changes in the Employers' Net Pension Liability and Related Ratios – Pension Plan.....	50
Combining Schedule of Employer Contributions – Pension Plan.....	50
Schedule of Investment Returns.....	50
Notes to Required Supplementary Information – Last Ten Fiscal Years.....	51
Schedule of Funding Progress – OPEB Plans.....	53
Schedule of Employer Contributions – OPEB Plans.....	53
Supporting Schedules:	
Real Estate Investments by Type and by Location.....	54
Alternative Investments.....	55
Net Appreciation (Depreciation) in Fair Value of Investments.....	56
Real Estate Investments—Income and Expenses.....	57
Investment Activity Fees and Other Investment Related Expenses.....	57
Interest Income.....	58
Dividend Income.....	58
Alternative Investment Income (Loss).....	58
Contributions.....	59
Benefits.....	60
Refunds of Contributions.....	60
Administrative Expenses.....	61
Professional Fees.....	61
Membership Composition.....	62

### INVESTMENT SECTION

Investment Consultant's Letter.....	64
Investment Reports:	
Annualized Investment Returns—Actual Versus Indices.....	66
Ten Year History of Time-Weighted Total NHRS Fund Annual Returns.....	66
Actual Asset Allocation Versus Target Asset Allocation.....	67
Ten Largest Stock Holdings by Fair Value.....	68
Ten Largest Fixed Income Holdings by Fair Value.....	68
Schedule of Investment Management and Service Fees.....	69
Schedule of Brokerage Commissions Paid.....	69
Net Position Held in Trust for Benefits.....	70
Summary of Investments.....	70

### ACTUARIAL SECTION

Actuarial Certification.....	72
Summary of Actuarial Assumptions and Methods.....	74
Historical Membership Data—Active and Retired.....	82
Solvency Test.....	84
Analysis of Past Financial Experience.....	86
Summary of Principal Plan Provisions as Interpreted for Valuation Purposes.....	88

### STATISTICAL SECTION

Statistical Section Summary.....	96
Schedule of Changes in Net Position.....	98
Schedule of Benefit and Refund Deductions by Type.....	104
Schedule of Retired and Vested Members by Type of Benefit.....	106
Schedules of Average Benefit Payment Amounts.....	110
Principal Participating Employers.....	126
Listing of Participating Employers.....	129



LETTER FROM  
THE CHAIR



New Hampshire Retirement System  
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Phone: (603) 410-3500 - Fax: (603) 410-3501  
Website: [www.nhrs.org](http://www.nhrs.org) - Email: [info@nhrs.org](mailto:info@nhrs.org)



Richard A. Gustafson, PhD  
Chair  
Board of Trustees

December 20, 2016

To the Members and Beneficiaries of the New Hampshire Retirement System:

On behalf of the Board of Trustees of the New Hampshire Retirement System (NHRS, the retirement system), I am pleased to present NHRS' Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2016. This report describes the financial conditions of both the Pension Plan and the Other Post Employment Benefit (OPEB) Plans. The report also describes various changes that occurred during Fiscal Year 2016.

The Board of Trustees has the responsibility to ensure that the interests of members and beneficiaries are properly safeguarded over the long term.

Trustees in 2016 adopted a number of changes to the retirement system's demographic and economic actuarial assumptions — including a reduction in the assumed rate of investment return from 7.75% to 7.25% — to better reflect the retirement system's expectations going forward. The changes were part of a package of recommendations contained in a statutorily required five-year experience study conducted by the retirement system's consulting actuary.

After months of detailed review and consultations with outside experts, staff, and the Independent Investment Committee, the new assumptions were adopted in May 2016, and utilized for the actuarial valuation for the fiscal year ending June 30, 2015. By statute, this valuation was used to determine employer contribution rates for fiscal years 2018 and 2019. The New Hampshire Constitution (Part I, Article 36-a) requires NHRS Trustees to set actuarially sound employer contribution rates and requires employers to annually pay those rates in full.

At June 30, 2016, the funded ratio of the Pension Plan stood at 60.0% and the OPEB Plans at 3.7%, versus 59.2% and 2.6% in the previous year, respectively. Funding status is measured by comparing the actuarial value of assets to the cost of accrued benefits owed now and in the future.

The OPEB plans provide a post-employment medical subsidy benefit to qualified Group I and Group II members. Because the OPEB plans are closed to new members and, as required by statute, are essentially funded on a pay-as-you-go basis, they do not, for the most part, have substantial assets set aside for future funding and benefits are paid from annual employer contributions.

At the close of the fiscal year, the retirement system's net position held in trust was \$7.461 billion, a decrease of approximately \$69 million over the prior fiscal year. The decrease is the result of benefit payments exceeding contributions and investment income, which may occur in any given year.

In addition to actuarial funding data noted above, this year's CAFR includes financial accounting information required under Governmental Accounting Standards Board (GASB) statements No. 67 and No. 72, which deal with financial reporting for pension plans. This information is for accounting purposes only and does not impact employer contribution rates or the statutory funding plan in place to pay down the NHRS unfunded liability.

NHRS realized a 1.0% return on investments in the fiscal year ended June 30, 2016, less than the retirement system's assumed rate of investment return of 7.25%. The three-year, five-year, 10-year, 20-year, and 25-year returns for the period ended June 30, 2016, were 7.1%, 7.2%, 6.0%, 7.0%, and 8.2%, respectively. All returns are net of fees.

The relative performance of our investments has been strong. Compared to the members in the InvestorForce Public Defined Benefit Universe, which represents 260 public plans totaling more than \$454.6 billion in assets, NHRS performed better than 65% of its peers over the one-year period and better than three-quarters of its peers over the three-, five-, 10-, 20-, and 25-year periods. In addition, NHRS' investment and administrative expenses are 20 percent below the average expenses reported in the most recent of survey of public pension plans compiled by the National Conference on Public Employee Retirement Plans.

NHRS pursues a long-term investment strategy designed to meet its funding requirements. The Board sets an investment policy, including asset allocation, and selects an investment consultant to advise the Independent Investment Committee



(IIC). The IIC continuously works closely with the consultant and staff to review and change, as appropriate, strategies, external asset managers, and selection of specific investments.

In addition to the information on investments contained in this report, more detailed information on NHRS-specific investment activities and current economic and market climate is provided in the Comprehensive Annual Investment Report for Fiscal Year 2016, issued separately by the IIC.

In the past decade, a number of legislative and policy changes have put NHRS on a path to financial health, including a 30-year amortization of the retirement system's UAAL through 2039. Next year, a statutorily created decennial commission will convene to make recommendations to ensure the long-term viability of the retirement system following upon the original 2007 commission.

Through a number of recent and ongoing initiatives, NHRS has continued to strengthen its operations, efficiency, and stakeholder outreach. These efforts include transitioning annual member account statements to online availability, restructuring of the employer services operation, and further enhancements to IT infrastructure and cyber security to better protect member information.

The Board expresses its thanks to former Trustees Dean Crombie and Bruce Moorehead, who left the Board in 2016. Trustee Crombie, who retired as Somersworth Police Chief on June 1, was the longest-tenured member of the Board at the time of his retirement, serving since 2003. William Hart joined the Board this year as the police member representative.

We are pleased with the continued progress that has been made toward improving internal operational efficiencies and controls, delivering timely and professional services and implementing the necessary changes to support the sustainability and stability of NHRS. The Board and staff are committed to proactively meeting these challenges for the benefit of the retirement system's members and beneficiaries.

Sincerely,



Richard A. Gustafson, PhD  
Chair, Board of Trustees

**BOARD OF TRUSTEES**

**BOARD OF TRUSTEES**



**Richard A. Gustafson, PhD**  
*Chair, Public Member*  
August 2011 to August 2017



**J. David McCrillis**  
*Public Member*  
August 2012 to July 2018



**Maureen Kelliher**  
*Public Member*  
June 2014 to July 2017



**Hershel D. Sosnoff**  
*Public Member*  
November 2011 to November 2017



**Donald M. Roy, Jr.**  
*Employer Member*  
July 2011 to July 2017



**John T. Beardmore**  
*Employer Member*  
December 2012 to July 2017



**Julia N. Griffin**  
*Employer Member*  
December 2014 to September 2017



**Germano Martins**  
*Employee Member*  
May 2013 to July 2018



**Tonya J. Angwin**  
*Teacher Member*  
October 2014 to July 2018



**George A. Walker**  
*Firefighter Member*  
July 2012 to July 2018



**William Hart**  
*Police Officer Member*  
August 2016 to July 2018



**William Dwyer**  
*State Treasurer*  
March 2014 ex officio

**Vacant**  
*Employer Member*

**INDEPENDENT  
INVESTMENT  
COMMITTEE**

***INDEPENDENT MEMBERS***



**Harold Janeway, Chair**  
January 2009–November 2010  
December 2010–Present



**David A. Jensen**  
January 2009–December 2010  
December 2011–Present



**Patrick O'Donnell**  
May 2009–December 2010  
July 2011–Present

***TRUSTEE MEMBERS***



**Maureen Kelliher**  
June 2014–Present



**Hershel Sosnoff**  
January 2012–Present

**CERTIFICATE OF  
ACHIEVEMENT**



Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

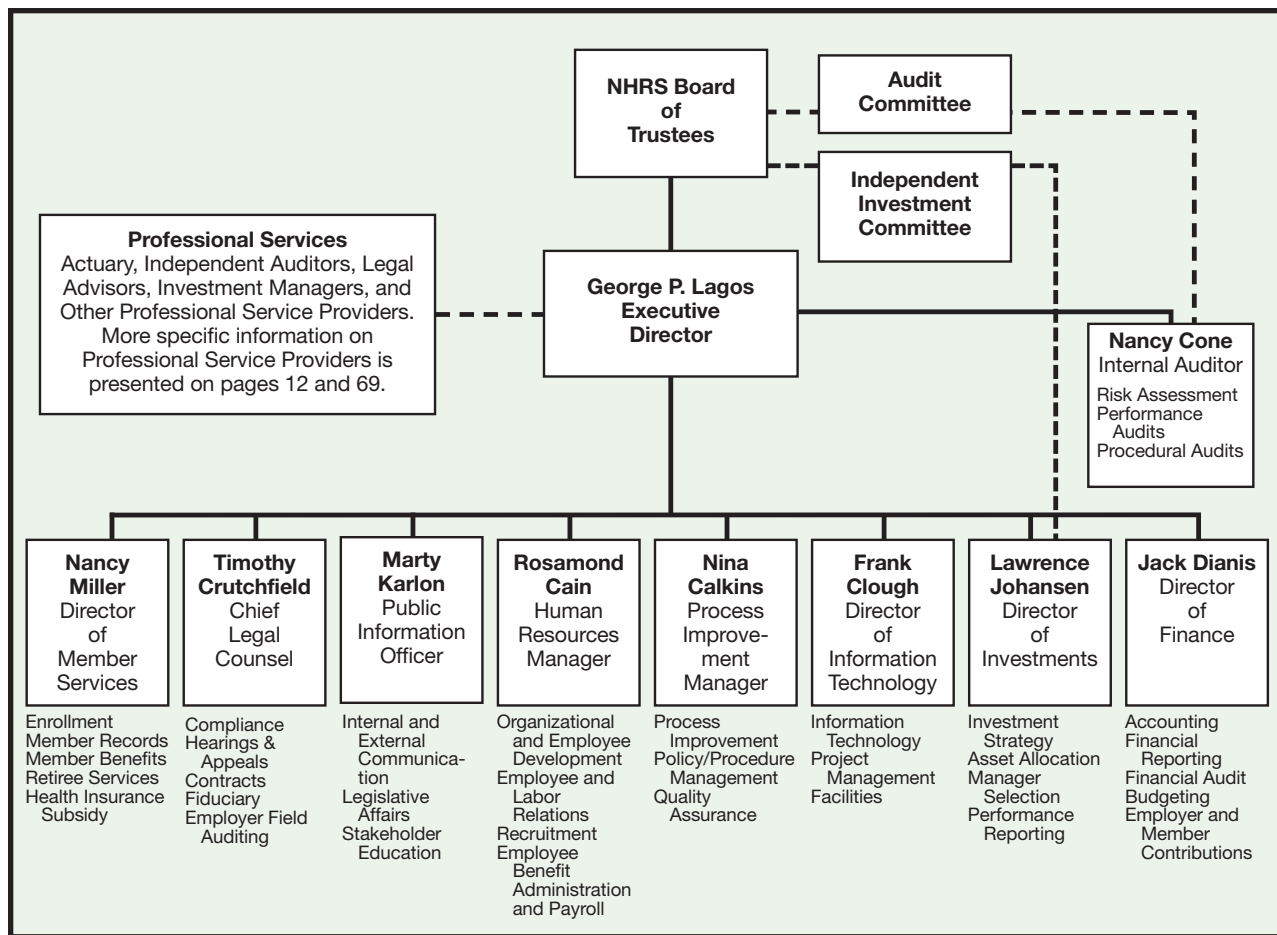
**New Hampshire Retirement System**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2015**

Executive Director/CEO

**ADMINISTRATIVE ORGANIZATION**



**NHRS MANAGEMENT TEAM**



Seated left to right: Shannan Hudgins, Jack Dianis, George P. Lagos, Lawrence A. Johansen, Mark Cavanaugh, Tracey Horner  
Standing left to right: Heather Fritzky, Timothy J. Crutchfield, Nancy Cone, Frank Clough, Rosamond Cain, Cecile Merrill, Nancy Miller, Nina Calkins, Marty Karlon and Tamre McCrea. Absent when photo was taken: Cynthia Peterson.

## PROFESSIONAL MANAGERS, ADVISORS AND SERVICE PROVIDERS

### DOMESTIC EQUITY MANAGERS

AllianceBernstein L.P.  
Blackrock Institutional Trust  
Company, N.A.  
Boston Trust & Investment  
Management Company  
Institutional Capital LLC  
LSV Asset Management  
Segall, Bryant and Hamill  
Thompson, Siegel & Walmsley LLC  
Wellington Management Company,  
LLP

### NON-U.S. EQUITY MANAGERS

Aberdeen Asset Management Inc.  
Artisan Partners  
Causeway Capital Management  
Fisher Investments  
Grantham, Mayo, Van Otterloo & Co.  
LLC  
LSV Asset Management  
Neuberger Berman  
Walter Scott & Partners Limited  
Wellington Trust Company, N.A.

### FIXED INCOME MANAGERS

Brandywine Global Investment  
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DoubleLine Capital  
GAM  
Income Research &  
Management  
Loomis Sayles &  
Company, L.P.  
Manulife Asset Management

### PRIVATE DEBT & EQUITY MANAGERS

Alcentra  
Apax Partners  
Avenue Capital Group  
BlackRock Private Equity Partners  
BlueBay Asset Management  
Carlyle Group  
CarVal Investors  
CCMP Capital  
Comvest Partners  
Coller Capital  
Crescent Capital Group  
Edgewater Growth Capital Partners  
Gramercy  
HarbourVest Partners  
Industry Ventures  
Ironwood Capital  
Kayne Anderson Capital Advisors  
Lexington Capital Partners  
MatlinPatterson Global Advisers  
Monroe Capital  
NGP Energy Capital Management  
Paul Capital  
Pine Brook Capital Partners  
Riverstone Holdings  
RFE Investment Partners  
Siguler Guff & Co.  
SL Capital Partners  
Standard Life Investments  
Tennenbaum Capital Partners  
Top Tier Capital Partners  
VSS  
Warburg Pincus

### REAL ESTATE MANAGERS

The Townsend Group

### TRANSITION MANAGERS

Abel/Noser Corporation  
BlackRock Institutional Trust  
Company, N.A.  
Russell Implementation Services  
State Street Bank and Trust  
Company

### INDEPENDENT AUDITORS

KPMG LLP

### INVESTMENT ADVISOR

NEPC, LLC

### ACTUARIAL CONSULTANT

Gabriel, Roeder, Smith & Company

### LEGAL ADVISORS

Foster Pepper PLLC  
Getman, Stacey, Schulthess &  
Steere, P.A.  
Groom Law Group  
Peter T. Foley, Esquire  
Sulloway & Hollis PLLC  
McLane Middleton, P.A.

### CUSTODIANS

Citizens Bank-NH  
(In-state Custodian)  
BNY Mellon  
(Master Custodian)

### CORPORATE GOVERNANCE SERVICES

Institutional Shareholder Services,  
Inc.

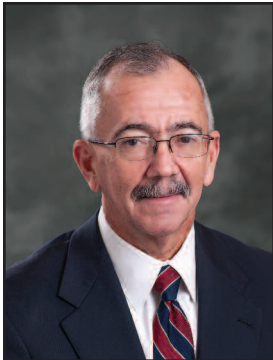
### TRADING COST ADVISOR

Abel/Noser Corporation





**New Hampshire Retirement System**  
**54 Regional Drive, Concord, NH 03301**  
**Phone: (603) 410-3500 - Fax: (603) 410-3501**  
**Website: [www.nhrs.org](http://www.nhrs.org) - Email: [info@nhrs.org](mailto:info@nhrs.org)**



*George P. Lagos*  
*Executive Director*

December 20, 2016

Dear Chair and Members of the Board of Trustees:

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the New Hampshire Retirement System (NHRS) for the fiscal year ended June 30, 2016. This comprehensive report is designed to comply with the provisions of the Revised Statutes Annotated (RSA) 100-A:15, VI of the State of New Hampshire.

The management at NHRS is responsible for the complete and fair presentation of financial information and the accompanying disclosures in this report. This report fairly presents the combined assessment of the investment results and the financial condition of the Pension Plan and the Post-Employment Medical Plans.

The Pension Plan was established in 1967 to consolidate and replace four separate pension plan systems: the New Hampshire Teachers' Retirement System, the New Hampshire State Employees Retirement System, the New Hampshire Policemen's Retirement System, and the New Hampshire Permanent Firemen's Retirement System. The Pension Plan provides service retirement, disability retirement, and survivor benefits for all full-time state employees, public school teachers and administrators, permanent police officers, and permanent firefighters. Full-time employees of political subdivisions (such as county, municipal or school district employees) are also eligible to become members if the local governing body elects participation. At the close of the fiscal year, there were 48,069 active members and 32,776 retirees or beneficiaries.

The Pension Plan is a qualified governmental plan within the meaning of section 414(d) of the United States Internal Revenue Code and has a separately appointed governing body. Based on financial reporting guidelines, the Pension Plan is deemed to be a single pension plan. In addition, NHRS administers post-employment medical plans (OPEB Plans) for qualified Group I and Group II members.

### **BUDGET CONTROLS AND NHRS ADMINISTRATION**

The administrative budget for fiscal year 2016 was proposed by management, approved by the Board of Trustees, submitted under the budget preparation guidelines of the State of New Hampshire, and passed into law by the New Hampshire Legislature. For financial reporting purposes, NHRS is considered a component unit of the State of New Hampshire.

NHRS is administered by a 13-member Board of Trustees, which includes the State Treasurer as an ex officio member, one employee member, one teacher member, one firefighter member, one police officer member, four public nonmembers, and four employer representatives. The Board of Trustees sets the investment policy, formulates administrative policies, and authorizes benefit payments to members and their beneficiaries. The NHRS Independent Investment Committee is responsible for investing in accordance with policies established by the Board; selecting investment managers, agents, and custodial banks; reviewing performance; and making recommendations to the Board regarding investment consultants, asset allocation, and other investment policy matters. Administrative functions are directed by the Executive Director and are carried out by the administrative staff.

### **ACCOUNTING SYSTEM AND INTERNAL CONTROL**

The CAFR has been prepared in conformity with U.S. generally accepted accounting principles (GAAP). The financial statements are prepared on the accrual basis of accounting. Contributions are recognized as revenue in the period when they become due pursuant to statutory requirements. Investment income is recognized as it is earned. Benefits, refunds, and investment expenses are recognized when they become due and payable. Net appreciation (depreciation) in the fair value of investments is recorded as an increase (decrease) to investment income based on the valuation of investments as of the date of the financial statements. Trade commissions and related transaction costs are netted against the fair value of investments. Capital assets are recognized in the financial statements in accordance with NHRS's established capital asset policy.

The management at NHRS is responsible for maintaining a system of internal controls which is designed to provide reasonable assurance that the assets are adequately safeguarded and the financial reports and financial statements are fairly



stated. There is not an expectation from management that the internal controls will prevent or detect all errors and fraud. A control system, no matter how well designed and operated, can provide reasonable, not absolute, assurance that the objectives of the control system are met. The concept of reasonable assurance recognizes that: (1) The cost of a control should not exceed the benefits likely to be derived; and (2) The evaluation of costs and benefits requires estimates and judgments by management. Management believes its internal control structure meets these objectives.

**FINANCIAL PERFORMANCE**

For the fiscal year ended June 30, 2016, plan net position decreased \$69.1 million to \$7,460.9 million compared to a \$116.0 million net position increase for the prior year. Positive investment returns for the five years ended June 30, 2016, contributed to a slight increase in the retirement system’s funded ratio. While the economy is showing slow but incremental signs of improvement, the retirement system still has significant financial challenges ahead of it. A detailed discussion of investment performance, the sources of additions and deductions, and results of operations is covered in the Management’s Discussion and Analysis beginning on page 21.

**FUNDING STATUS**

In order to ensure that current and future retirement benefits are safeguarded and available to members at retirement, NHRS evaluates the actuarial value of the Plans’ assets compared to the actuarial value of the Plans’ liabilities as an indication of the extent to which the Plans are funded each year. This measure is called the plan funded ratio. Significant legislation was enacted in the 2008 and 2011 legislative sessions aimed at improving the funded ratios of the Plans.

The Pension Plan funded ratio at June 30, 2016, based on the June 30, 2016, interim actuarial valuation was 60.0%. The retirement system actuary conducted an experience study that covered the period of June 30, 2010, through June 30, 2015. Revised actuarial assumptions were adopted by the Board in May 2016. The Pension Plan funded ratio of 63.4% reported in the 2015 Comprehensive Annual Financial Report was based on the prior actuarial assumptions. Following the adoption of the new actuarial assumptions, a new actuarial valuation for the fiscal year ended June 30, 2015, was prepared by the actuary and accepted by the Board. Under the new assumptions, the Pension Plan funded ratio at June 30, 2015, was 59.2%. The ratio of Plan net position to the Plan liability under GAAP is separately determined and discussed in the financial statements.

The most accurate comparison of funding status would be between the June 30, 2016, funded ratio of 60.0% and the funded ratio at June 30, 2015, of 59.2% using the new actuarial assumptions. The year-over-year change is consistent with expectations.

The funded ratios of the OPEB Plans as of June 30, 2016, and June 30, 2015 both with and without the new assumptions, are as follows:

OPEB Plans	June 30, 2016	June 30, 2015 with new assumptions	June 30, 2015 before new assumptions
Group I Political Subdivision Employees	34.7%	35.7%	37.5%
Group I State Employees	2.0%	0.6%	0.7%
Group I Teachers	(1.8%)	(5.0%)	(5.8%)
Group II Police Officers and Firefighters	3.0%	2.9%	3.3%
OPEB Total	3.7%	2.6%	2.9%

A comprehensive analysis of funding progress for the Plans is provided in the Required Supplementary Information beginning on page 50.

NHRS adopted an actuarial funding policy in FY 2014 which defines the actuarial method and assumptions used to determine the employer contribution rates necessary to fund the plan. For more details on NHRS’ actuarial funding policy, go to [www.nhrs.org](http://www.nhrs.org).

**NET PENSION LIABILITY**

The total pension liability is the accrued liability for benefits owed now and in the future based on the Entry Age Normal funding method. The fiduciary net position is the fair value of plan net assets. The net pension liability is the total pension liability, less the amount of the pension plan’s fiduciary net position. These disclosures are accounting measurements, not actuarial measurements of the funded status of the plan, and are not used to develop employer contribution rates.

**INVESTMENTS**

RSA 100-A:15 grants the New Hampshire Retirement System Board of Trustees the authority to adopt the investment policy for NHRS. Effective January 1, 2009, an Independent Investment Committee (IIC) was established by statute grant-

ing it authority to invest and reinvest NHRS funds in accordance with the investment policy adopted by the Board of Trustees. Prior to January 1, 2009, the Board of Trustees had the authority to invest and reinvest NHRS funds.

The Independent Investment Committee consists of not more than five members, three of whom are not members of the Board of Trustees and up to two of whom are members of the Board of Trustees appointed by the chairperson of the Board of Trustees. The Trustees and Independent Investment Committee members are fiduciaries and discharge their duties solely in the interest of the Plans' participants and beneficiaries. In the management of the Plans' assets, the Board of Trustees and the Independent Investment Committee members must exercise the care, skill, and caution under the circumstances then prevailing that a prudent person acting in a like capacity would use in the conduct of an activity of like character and purpose.

The annualized total fund investment returns for the one-year, three-year, five-year, ten-year, and twenty-year periods ended June 30, 2016, were 1.0%, 7.1%, 7.2%, 6.0%, and 7.0%, respectively. A discussion about comparative annualized returns and related benchmark indices for fiscal years 2016 and 2015 is presented in the Management's Discussion and Analysis beginning on page 21.

### MAJOR INITIATIVES

NHRS faces many of the same issues common to other public employee retirement plans. As part of its proactive response to these challenges, the retirement system strives to create a culture of constant improvement. Some of the significant accomplishments during fiscal year 2016 were:

- Successfully implemented requirements of GASB 68 (Accounting and Financial Reporting for Pensions), including the creation of training and educational materials for employers, lawmakers and other stakeholders.
- Revised a number of key actuarial assumptions based on the findings contained in a statutorily mandated actuarial experience study. The changes, which were made to better reflect the retirement system's actual and anticipated experience, included reducing assumed rate of investment return from 7.75% to 7.25%, increasing the mortality assumption and reducing the payroll growth factor.
- Transitioned the issuance of annual member account statements to online availability, enhancing security and saving significant print and postage expense.
- Performed an operational risk assessment to identify, evaluate, communicate and monitor risk.
- Provided participating employers and insurance vendors with the ability to submit insurance premium rate changes electronically, saving substantial staff time and reducing the opportunities for data entry errors.
- Achieved investment performance for FY 2016 of 1.0% which placed NHRS in the top 35% of the peer universe of public pension plans; the three-, five-, and 10-year returns of 7.1%, 7.2% and 6.0% are in the top 20% of peer plans.
- Released a series of interpretive memoranda on a variety of subjects, providing guidance in understanding and implementing various provisions of the retirement system's controlling statute, RSA 100-A, as a guide for participating employers.
- Implemented automation of the annual gainful occupation reporting process for disability retirees.
- Implemented a reorganization of the employer services operation to streamline process and improve service as part of our Process Improvement Process.
- Replaced the retirement system's end-of-life Oracle-based imaging system with PCX solution, an integrated imaging solution provided by LRS, our pension administration application partner. The project included the transition of 1.5 million stored documents to the new database.
- Completed a multi-faceted cybersecurity initiative, which included deploying multifactor VPN and email encryption, implementing an upgraded Cisco firewall, purchasing cyber liability insurance coverage, and providing security awareness training to staff.
- Established new co-location (COLO) site for NHRS IT infrastructure to provide redundancy for NHRS data in addition to the existing disaster recovery protections in place for our pension data.
- Upgraded email software and increased size of subscriber list by 600%.
- Successfully piloted educational presentations geared to new members as part of a multi-year effort to expand education and outreach to members, retirees, and employers.
- Earned a Certificate of Achievement for Excellence in Financial Reporting for both the Comprehensive Annual Financial Report (CAFR) and Summary CAFR.

### INDEPENDENT AUDIT

RSA 100-A:15 VI. (a) requires the Audit Committee of the Board of Trustees to engage the services of a qualified independent auditor to perform an annual audit each fiscal year. For fiscal year 2016, the Audit Committee designated KPMG

LLP to conduct the annual audit. The independent auditors' report, audited financial statements, required supplementary information, and supporting schedules are included in the Financial Section of this report.

**ACTUARIAL REVIEW AND VALUATION**

An actuarial review, commonly called an experience study, of the mortality, service, withdrawals, and compensation experience of members is required by statute at least once during each five-year period. The last actuarial review was performed during fiscal year 2016 by NHRS' current actuary, Gabriel, Roeder, Smith and Company and was based on the information available as of June 30, 2015. An actuarial valuation of the assets and liabilities is required by statute at least once during each two-year period. The June 30, 2015 actuarial valuation was used to determine employer contribution rates for fiscal years 2018 and 2019. An interim valuation as of June 30, 2016 has been completed for the purpose of determining the actuarial information included in this report and to inform policy-making bodies during the coming year. The actuarial certification and supporting statistics are included in the Actuarial and Statistical Sections of this report.

**CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING**

The NHRS Comprehensive Annual Financial Report for the fiscal year ended June 30, 2015, was awarded the Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association of the United States and Canada (GFOA). The Certificate of Achievement is the highest form of recognition in the area of state and local governmental accounting and financial reporting, and attaining it represents a significant accomplishment by a government and its management. We are gratified that NHRS has received this award for 24 of the past 25 years. A copy of the fiscal year 2015 award is presented on page 10.

**ACKNOWLEDGMENTS**

The compilation of this report reflects the combined efforts of the NHRS administrative staff under the direction of the Board of Trustees. It is intended to provide extensive and reliable information as a basis for making management decisions, determining compliance with legal provisions, and for determining responsible stewardship for the investment and accounting for assets of plan participants. We would like to take this opportunity to express our gratitude to the Board of Trustees for its guidance and support and to the administrative staff for their dedication and commitment to the mission, vision and values of the New Hampshire Retirement System. We would also like to note our appreciation for the professional and diligent work of the Independent Investment Committee whose efforts have generated superior returns in accordance with the Board's investment policy.

Respectfully submitted,

George P. Lagos



Executive Director

Jack W. Dianis



Director of Finance

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NEW HAMPSHIRE RETIREMENT SYSTEM

# FINANCIAL SECTION

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[CLICK HERE TO RETURN TO TABLE OF CONTENTS](#)

**INDEPENDENT  
AUDITORS'  
REPORT**

KPMG LLP  
Two Financial Center  
60 South Street  
Boston, MA 02111

The Board of Trustees  
New Hampshire Retirement System:

**REPORT ON THE FINANCIAL STATEMENTS**

We have audited the accompanying financial statements of the New Hampshire Retirement System (the System), a component unit of the State of New Hampshire, as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

**MANAGEMENT'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

**AUDITORS' RESPONSIBILITY**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**OPINION**

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2016 and the changes in its fiduciary net position for the year then ended in accordance with U.S. generally accepted accounting principles.

**OTHER MATTERS*****Prior-Year Comparative Information***

We have previously audited the System's 2015 financial statements, and we expressed an unmodified opinion on those financial statements in our report dated December 8, 2015. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2015 is consistent, in all material respects, with the audited financial statements from which it has been derived.

***Required Supplementary Information***

U.S. generally accepted accounting principles require that management's discussion and analysis on pages 21–25, the schedules of changes in the employer's net pension liability and related ratios, employer contributions, and investment returns — pension plan and the related notes to required supplementary information on pages 50–52, and the schedules of funding progress and employer contributions — OPEB plans on page 53, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Ac-

counting Standards Board who consider it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, and historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### **Supplementary and Other Information**

Our audit was conducted for the purpose of forming an opinion on the basic financial statements. The Supporting Schedules as detailed in the accompanying table of contents, and the Introductory, Investment, Actuarial, and Statistical Sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Supporting Schedules as of and for the year ended June 30, 2016 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Supporting Schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

We also previously audited, in accordance with auditing standards generally accepted in the United States of America, the basic financial statements of the System as of and for the year ended June 30, 2015 (not presented herein), and have issued our report thereon dated December 8, 2015, which contained an unmodified opinion on those financial statements. The Supporting Schedules as of and for the year ended June 30, 2015 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the 2015 financial statements. Such information been subjected to the auditing procedures applied in the audit of the 2015 basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those financial statements or to those financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Supporting Schedules as of and for the year ended June 30, 2015 are fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2015.

The Introductory, Investment, Actuarial, and Statistical Sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

### **OTHER REPORTING REQUIRED BY GOVERNMENT AUDITING STANDARDS**

In accordance with *Government Auditing Standards*, we have also issued our report dated December 20, 2016 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

**KPMG LLP**

December 20, 2016

KPMG LLP is a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

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## MANAGEMENT'S DISCUSSION AND ANALYSIS — REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

This section presents management's discussion and analysis of the New Hampshire Retirement System's (NHRS) financial performance during the fiscal year ended June 30, 2016 and is presented as a narrative overview and analysis in conjunction with the Letter of Transmittal included in the Introductory Section of the System's Comprehensive Annual Financial Report. The report presents the combined assessment of the financial performance of the Pension Plan and the OPEB Plans.

The discussion and analysis is intended to serve as an introduction to the basic financial statements. These statements include the Combining Statements of Fiduciary Net Position and Changes in Fiduciary Net Position, and the related Notes to the Financial Statements for the fiscal year ended June 30, 2016 with summarized comparable totals for fiscal year 2015. In addition, Required Supplementary Information is provided for the Pension plan and OPEB plans. The excess of assets over liabilities is reported as "Net Position Restricted for Pension and Other Post Employment Benefits (OPEB)."

### FINANCIAL HIGHLIGHTS

Net position decreased by \$69.1 million (−0.9%) from the prior year's net position reflecting some uncertainty in the financial market.

Net investment income during fiscal year 2016 was \$62.0 million, a \$188.9 million (−75.3%) decrease over the prior fiscal year. The net investment income for fiscal year 2016 reflects a time-weighted return for the total fund during the year of 1.0% compared to a time-weighted investment return of 3.5% for the fiscal year ended June 30, 2015.

The total contributions received during the fiscal year were \$623.6 million. For fiscal year 2015, total contributions received were \$585.3 million.

Employer contributions for fiscal year 2016 increased 9.1%, to \$415.7 million compared with employer contributions in fiscal year 2015 of \$381.2 million. The increase in employer contributions in fiscal year 2016 was primarily due to higher contribution rates.

Member contributions were \$207.9 million in fiscal year 2016, an increase of 1.9% over fiscal year 2015 member contributions of \$204.1 million. The increase in member contributions is primarily due to an increase in earnable compensation for contributing members. Overall member normal contributions increased by \$4.7 million or 2.4% over the prior fiscal year. Voluntary member contributions decreased by \$0.9 million or −15.3% over fiscal year 2015.

Benefits paid during fiscal year 2016 were \$722.2 million, an increase of 5.5% over the benefits paid in fiscal year 2015 of \$684.6 million. The increase in benefits paid in fiscal year 2016 is primarily due to an increase in the number of retirees and increased average benefit levels for those new retirees.

### FINANCIAL ANALYSIS

The following schedules report the Condensed Net Position Information and the Condensed Changes in Net Position Information for the NHRS for the fiscal years ended June 30, 2016 and June 30, 2015.

#### Condensed Comparative Plan Net Position — Combined Plans

(Dollar Values Expressed in Millions)

	As of June 30, 2016	As of June 30, 2015	Amount Increase (Decrease)	Percentage Increase (Decrease)
Cash	\$ 6.7	\$ 5.2	\$ 1.5	28.8%
Receivables	122.9	106.2	16.7	15.7%
Investments	7,372.7	7,460.7	(88.0)	( 1.2)%
Other Assets	0.2	0.2	0.0	0.0%
<b>Total Assets</b>	<b>\$ 7,502.5</b>	<b>\$ 7,572.3</b>	<b>\$ (69.8)</b>	<b>( 0.9)%</b>
Other Liabilities	41.5	42.2	( 0.7)	( 1.7)%
<b>Total Liabilities</b>	<b>\$ 41.5</b>	<b>\$ 42.2</b>	<b>\$ ( 0.7)</b>	<b>( 1.7)%</b>
<b>Net Position Restricted for Pension and Other Post Employment Benefits</b>	<b>\$ 7,461.0</b>	<b>\$ 7,530.1</b>	<b>\$ (69.1)</b>	<b>( 0.9)%</b>

Total assets decreased by \$69.8 million (−0.9%) in fiscal year 2016. Cash on hand at fiscal year end was \$6.7 million (28.8%) higher than at fiscal year end 2015 reflecting lower draw downs of liquidity reserves necessary to meet operating obligations. Receivables increased by \$16.7 million (15.7%) over the prior fiscal year primarily due to an increase in the amounts due from employers at fiscal year end. Investments decreased by \$88.0 million (−1.2%) in fiscal year 2016. The decrease in investments is attributable to a slight decline in the global markets. Other assets remained unchanged at \$0.2 million (0.0%) for fiscal year 2016.

Total liabilities decreased by \$0.7 million (-1.7%) at the end of fiscal year 2016 primarily due to a decrease in the liabilities (due to) OPEB plans at fiscal year end.

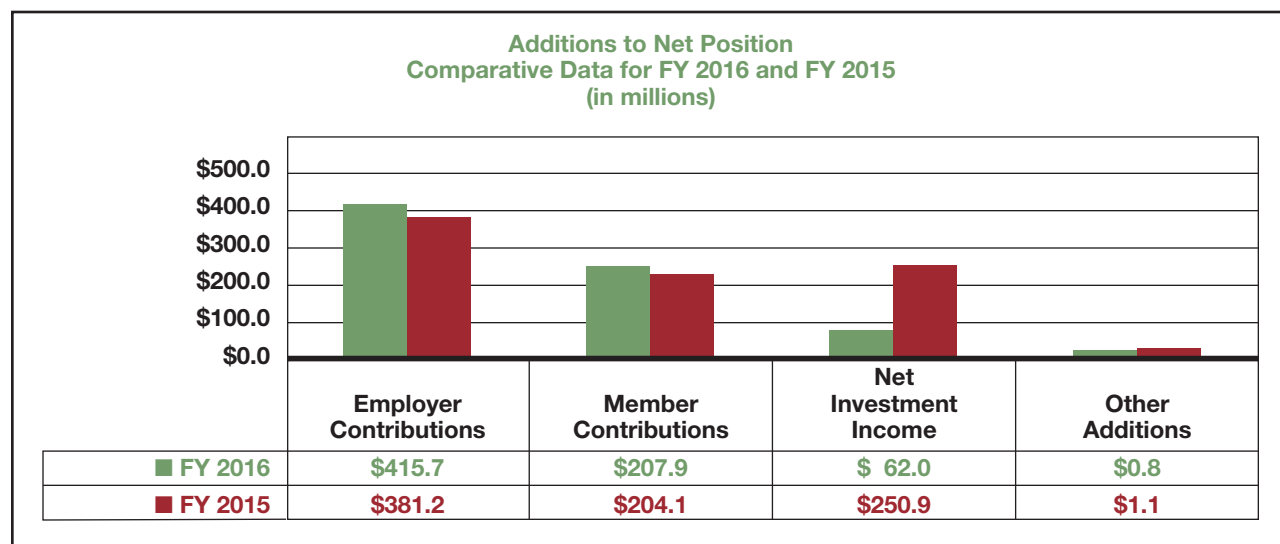
**Condensed Comparative Changes in Plan Net Position – Combined Plans**  
(Dollar Values Expressed in Millions)

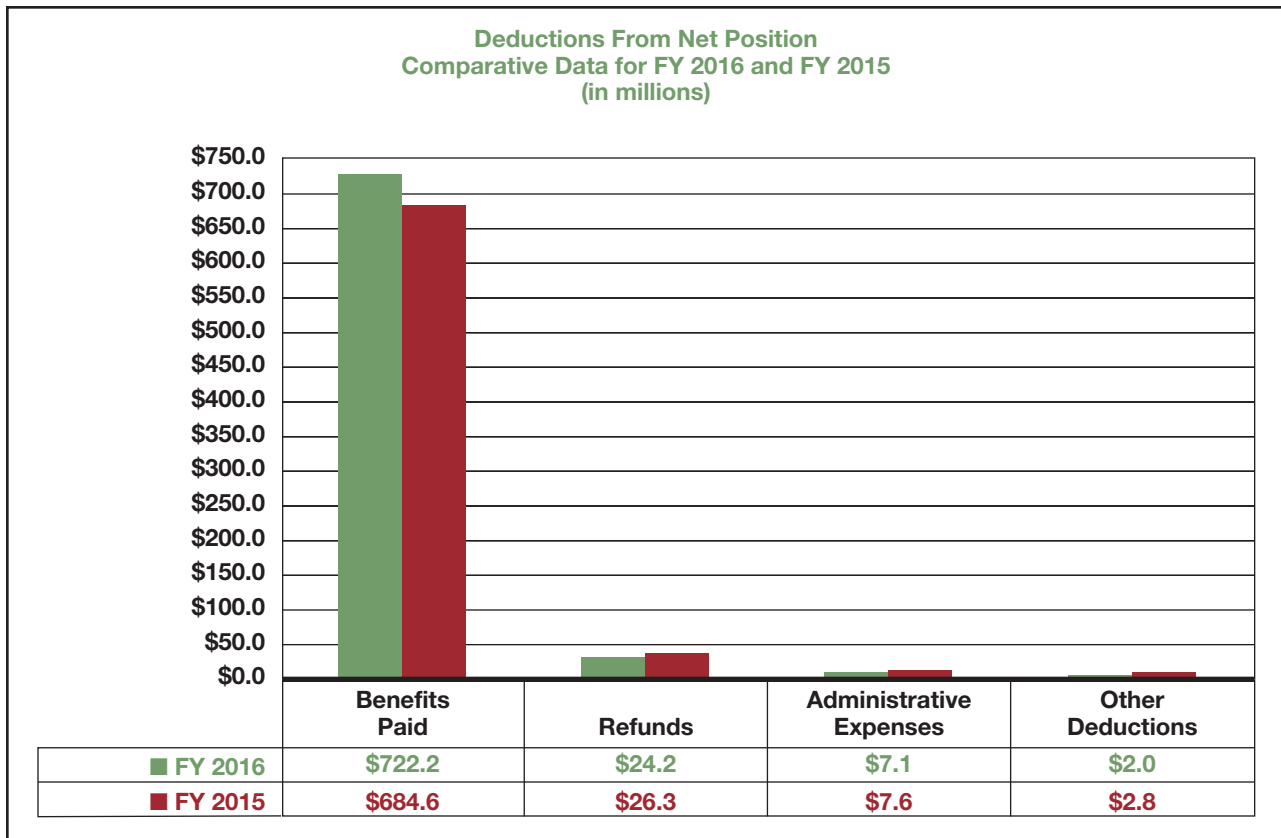
	Year Ended June 30, 2016	Year Ended June 30, 2015	Amount Increase (Decrease)	Percentage Increase (Decrease)
<b>ADDITIONS:</b>				
Employer Contributions	\$ 415.7	\$ 381.2	\$ 34.5	9.1%
Member Contributions	207.9	204.1	3.8	1.9%
Net Investment Income (Loss)	62.0	250.9	(188.9)	(75.3%)
Other Income	0.8	1.1	(0.3)	(27.3%)
<b>Total Additions to Plan Net Position</b>	<b>\$ 686.4</b>	<b>\$ 837.3</b>	<b>\$ (150.9)</b>	<b>(18.0%)</b>
<b>DEDUCTIONS:</b>				
Benefits Paid	\$ 722.2	\$ 684.6	\$ 37.6	5.5%
Refunds of Contributions	24.2	26.3	(2.1)	(8.0%)
Administrative Expense	7.1	7.6	(0.5)	(6.6%)
Other Deductions	2.0	2.8	(0.8)	(28.6%)
<b>Total Deductions from Plan Net Position</b>	<b>\$ 755.5</b>	<b>\$ 721.3</b>	<b>\$ 34.2</b>	<b>4.7%</b>
<b>Total Changes in Plan Net Position</b>	<b>\$ (69.1)</b>	<b>\$ 116.0</b>	<b>\$ (185.1)</b>	<b>(159.6%)</b>

**ADDITIONS TO NET POSITION**

For fiscal year 2016, the combined total of employer and member contributions increased by \$38.3 million or 6.5%. Employer contributions increased from \$381.2 million in fiscal year 2015 to \$415.7 million or 9.1% in fiscal year 2016. The increase in employer contributions is primarily due to higher contribution rates. Member contributions for fiscal year 2016 were \$207.9 million, an increase of \$3.8 million or 1.9% from fiscal year 2015. Member normal contributions increased \$4.7 million or 2.4% in fiscal year 2016 and voluntary member contributions decreased by \$0.8 million or -15.3%.

Over the long term, the Plan’s investment portfolio has been a major source for additions to plan net position. There was a net investment gain in fiscal year 2016 of \$62.0 million compared with a net investment gain in fiscal year 2015 of \$250.9 million. The net change from year-to-year was \$(188.9) million or -75.3%, a significant decrease from fiscal year 2015. The change in investment income reflects the increased volatility in global markets due to the strength of the U.S. dollar, uncertainty of future U.S. interest rates, the volatility in the price of oil, the concerns about the growth of the Chinese economy and the implications of the Brexit vote.





**DEDUCTIONS FROM NET POSITION**

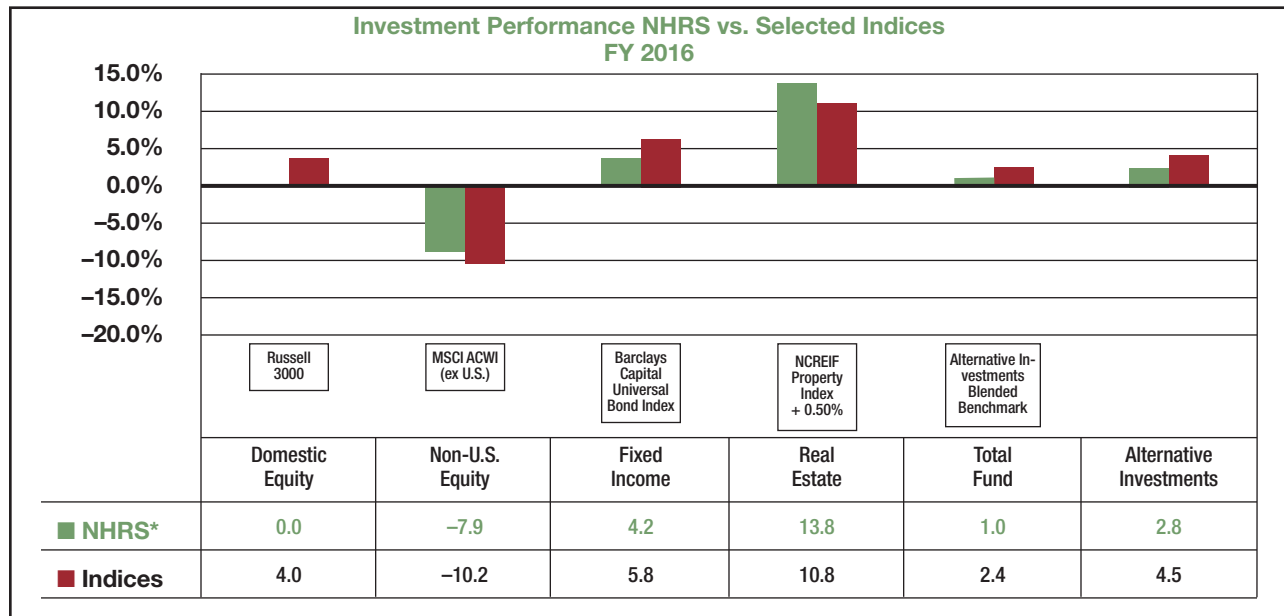
Total benefits paid in fiscal year 2016 were \$722.2 million, an increase of \$37.6 million or 5.5% over the fiscal year 2015 level of \$684.6 million. Pension benefits paid in fiscal year 2016 were \$670.4 million, an increase of \$39.0 million or 6.2% compared with the pension benefits paid in fiscal year 2015 of \$631.3 million. The increase in pension benefits paid in fiscal year 2016 is primarily due to an increase in the number of retirees and increased average benefit levels for those new retirees. OPEB benefits paid in fiscal year 2016 were \$51.8 million which was slightly lower than the benefits that were paid in 2015. The OPEB benefits that will be paid will continue to remain flat or go down over time. There is a very small population of active members that can still qualify for this benefit. Refunds of contributions were \$24.2 million, a decrease of \$2.1 million or –8.0% over the 2015 level of \$26.3 million. The decrease reflects a decrease in the number and dollar value of refund requests from terminated members in 2016.

Administrative expenses decreased by \$0.5 million or –6.1% in fiscal year 2016 to a level of \$7.1 million compared with \$7.6 million in 2015. Administrative expenses decreased primarily due to positions being filled at entry level pay.

**PLAN FUNDING STATUS**

Funded ratios are a useful measurement that can be used in conjunction with many other factors to assess the financial soundness of a pension or OPEB plan. The Pension Plan’s funded ratio is calculated by dividing the plan fiduciary value of assets available to pay pension benefits by the total pension accrued liability. The OPEB Plan’s funded ratio is calculated by dividing its actuarial value of assets at year end (5 year smoothing of fair values) by its actuarial accrued liability at year end. The liabilities that were used to determine the funded ratios for both the Pension and OPEB plans were determined using the entry age normal actuarial cost method for both fiscal year 2016 and 2015.

The total pension liability under GAAP at June 30, 2016, was \$12,751.9 million. The fiduciary net position available to pay pension benefits at June 30, 2016 was \$7,434.3 million, resulting in a net pension liability of \$5,317.6 million and a plan net position as a percentage of total pension liability of 58.3% at June 30, 2016. For fiscal year 2015, it was \$11,471.4 million. The plan fiduciary value of assets available to pay pension benefits at June 30, 2015 was \$7,509.9 million resulting in a net pension liability of \$3,961.5 million and a funded ratio of 65.5%.



\*\*Performance returns are calculated on a net-of-fees time-weighted rate of return basis.

The combined OPEB Plans actuarial accrued liability at June 30, 2016, based on the June 30, 2016 interim actuarial valuation, was \$730.1 million. The actuarial value of assets available to pay postemployment medical benefits at June 30, 2016 was \$27.3 million resulting in an unfunded actuarial accrued liability of \$702.8 million and a funded ratio of 3.7% at June 30, 2016. For fiscal year 2015, the OPEB Plans actuarial accrued liability at June 30, 2015, based on the June 30, 2015 actuarial valuation, was \$675.6 million. The actuarial value of assets available to pay OPEB benefits at June 30, 2015 was \$19.5 million resulting in an unfunded actuarial accrued liability of \$656.1 million and a funded ratio of 2.9%.

**NEW ACCOUNTING PRONOUNCEMENT**

In fiscal year 2016, the System retrospectively adopted the provisions of GASB Statement No. 72, *Fair Value Measurement and Application* (GASB 72) which prescribes how state and local governments should define and measure fair value. It also prescribes which assets and liabilities should be measured at fair value and expands disclosures related to fair value. This pronouncement is effective for all government entities with fiscal periods beginning after June 15, 2015.

**INVESTMENT PERFORMANCE**

NHRS recognizes that it operates in a dynamic economic environment. The challenges of investing the Plans’ funds strategically to achieve the actuarial rate of return while controlling risk are greater than ever. As such, NHRS has allocated assets to a broad range of asset classes.

Equity (53%), fixed income investments (24%), and cash equivalents (2%) comprise approximately 79% of invested assets at June 30, 2016. The remaining 21% of assets are invested in real estate (11%) and alternative investments (10%), which include private equity, private debt and absolute return strategies. These illiquid assets are expected to earn enhanced returns and manage risk through further diversification.

Investment performance results are measured by the relationship of the Plans’ portfolio returns for equity and fixed income investments against widely-accepted market indices. For the fiscal year ended June 30, 2016, the Plans’ total fund return was 1.0% compared to 3.5% for the fiscal year ended June 30, 2015. The difference in year-over-year performance was due to the increased volatility in global markets due to the strength of the U.S. dollar, the slowdown in the economy of China, and increased currency volatility.

The total NHRS fund performance of 1.0% for fiscal year 2016 underperformed the total fund custom index (a blended composition of major market indices in proportion to the NHRS’ asset allocation), which returned 2.4%, by 140 basis points. While the NHRS underperformed relative to the benchmark, the NHRS outperformed 65% of its peers. Domestic Equity generated a return of 0.0%, underperforming the Russell 3000 Index return of 4.0% by 400 basis points. The non-U.S. equity portfolio returned -7.9% during fiscal year 2016, outperforming the MSCI ACWI (ex U.S.) benchmark return of -10.2% by 230 basis points. Fixed income returned 4.2% and underperformed the Barclays Capital Universal Bond Index benchmark return of 5.8% by 160 basis points. The real estate portfolio gained 13.8% and outperformed the NCREIF

Property Index +0.50% benchmark return of 10.8% by 300 basis points. The alternative investment class provided a 2.8% return and underperformed the blended benchmark return of 4.5% by 170 basis points. The benchmark for this asset class is the S&P 500 +3.0% weighted to the allocation of private equity and private debt weighted to the allocation of absolute return strategies.

### **CONTACTING NHRS**

The Comprehensive Annual Financial Report is designed to provide a general overview of NHRS investment results and financial condition of the Pension Plan and OPEB Plans for the year ended June 30, 2016. Detailed information regarding NHRS' investments as of June 30, 2016 can be found in the Comprehensive Annual Investment Report which is published by the Independent Investment Committee of the NHRS. Please contact the NHRS office at 603.410.3500 for additional financial information or for questions related to this report, or the Comprehensive Annual Investment Report. Additional information can also be obtained from the NHRS website at [www.nhrs.org](http://www.nhrs.org).

## BASIC FINANCIAL STATEMENTS

### COMBINING STATEMENTS OF FIDUCIARY NET POSITION PENSION AND OTHER POSTEMPLOYMENT MEDICAL PLANS (OPEB) AS OF JUNE 30, 2016 (with summarized financial information as of June 30, 2015)

	PENSION PLAN 2016	GROUP II POLICE OFFICER & FIREFIGHTER OPEB PLAN 2016
<b>ASSETS:</b>		
Cash	\$ 6,723	\$ 8
Receivables:		
Due from Employers	46,545	—
Due from Group I Teacher OPEB Plan	—	1,478
Due from Plan Members	22,389	—
Due from Brokers for Securities Sold	29,853	36
Interest and Dividends	17,793	21
Other	1,669	2
<b>Total Receivables</b>	<b>118,249</b>	<b>1,537</b>
<b>INVESTMENTS AT FAIR VALUE</b>		
Cash and Cash Equivalents:	140,281	166
Equity Investments:		
Domestic	2,581,287	3,078
Non-U.S.	1,098,989	1,310
Fixed Income Investments:		
Domestic	1,512,607	1,804
Non-U.S.	246,445	294
Real Estate	785,098	936
Alternative Investments	981,425	1,170
<b>TOTAL INVESTMENTS</b>	<b>7,346,132</b>	<b>8,759</b>
Other Assets	189	—
<b>TOTAL ASSETS</b>	<b>7,471,293</b>	<b>10,304</b>
<b>LIABILITIES:</b>		
Management Fees and Other Payables	8,426	10
Due to Group I Political Subdivision OPEB Plan	—	—
Due to Group II Police & Fire OPEB Plan	—	—
Due to Group I State Employee OPEB Plan	—	—
Due to Brokers for Securities Purchased	28,549	34
<b>TOTAL LIABILITIES</b>	<b>36,975</b>	<b>44</b>
<b>NET POSITION (DEFICIT) RESTRICTED FOR PENSION AND OTHER POST EMPLOYMENT BENEFITS (OPEB)</b>	<b>\$7,434,318</b>	<b>\$10,260</b>

The accompanying notes are an integral part of the financial statements.

(in thousands)

GROUP I TEACHERS OPEB PLAN 2016	GROUP I POLITICAL SUBDIVISION OPEB PLAN 2016	GROUP I STATE EMPLOYEES OPEB PLAN 2016	TOTAL 2016	TOTAL 2015
\$ —	\$ 15	\$ 1	\$ 6,747	\$ 5,275
—	—	—	46,545	40,597
—	2,802	203	4,483	13,724
—	—	—	22,389	21,049
—	67	5	29,961	10,825
—	40	3	17,857	17,448
—	4	—	1,675	2,526
<b>—</b>	<b>2,913</b>	<b>211</b>	<b>122,910</b>	<b>106,169</b>
—	317	23	140,787	171,369
—	5,831	423	2,590,619	2,982,939
—	2,483	180	1,102,962	1,237,512
—	3,417	248	1,518,076	1,413,430
—	557	40	247,336	249,661
—	1,774	129	787,937	676,603
—	2,217	161	984,973	729,143
<b>—</b>	<b>16,596</b>	<b>1,203</b>	<b>7,372,690</b>	<b>7,460,657</b>
—	—	—	189	160
<b>—</b>	<b>19,524</b>	<b>1,415</b>	<b>7,502,536</b>	<b>7,572,261</b>
—	19	1	8,456	9,080
2,802	—	—	2,802	9,184
1,478	—	—	1,478	4,309
203	—	—	203	231
—	64	5	28,652	19,401
<b>4,483</b>	<b>83</b>	<b>6</b>	<b>41,591</b>	<b>42,205</b>
<b>(\$ 4,483)</b>	<b>\$19,441</b>	<b>\$1,409</b>	<b>\$7,460,945</b>	<b>\$7,530,056</b>



**COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION  
PENSION AND OTHER POSTEMPLOYMENT MEDICAL PLANS (OPEB)  
FOR THE YEAR ENDED JUNE 30, 2016 (with summarized financial information for the year ended June 30, 2015)**

	PENSION PLAN 2016	GROUP II POLICE OFFICER & FIREFIGHTER OPEB PLAN 2016
<b>ADDITIONS:</b>		
Contributions (NOTE 8):		
Employer – Normal	\$ 357,334	\$15,854
Employer – Other	148	–
<b>Total Employer Contributions</b>	<b>357,482</b>	<b>15,854</b>
Plan Member	207,949	–
<b>Total Contributions</b>	<b>565,431</b>	<b>15,854</b>
<b>Investment Income (Loss)</b>		
From Investment Activities:		
Net Appreciation (Depreciation) in Fair Value of Investments	(72,904)	(64)
Interest	53,850	47
Dividends	73,987	65
Net Real Estate Income	8,341	7
Alternative Investment Income	22,521	20
<b>Total Income (Loss) from Investment Activities</b>	<b>85,795</b>	<b>75</b>
Less: Investment Expenses:		
Investment Management Fees	21,954	20
Custodial Fees	622	1
Investment Advisor Fees	733	–
Investment Administrative Expense	608	1
<b>Total Investment Activity Expenses</b>	<b>23,917</b>	<b>22</b>
<b>Total Net Income (Loss) from Investment Activities</b>	<b>61,878</b>	<b>53</b>
<b>Total Net Investment Income (Loss)</b>	<b>61,878</b>	<b>53</b>
Interest Income	–	257
<b>TOTAL ADDITIONS</b>	<b>627,309</b>	<b>16,164</b>
<b>DEDUCTIONS:</b>		
Benefits Paid	670,360	16,528
Refunds of Contributions	24,233	–
Administrative Expense (NOTE 9)	7,061	6
Professional Fees	950	–
Interest Expense	–	–
Other	313	1
<b>TOTAL DEDUCTIONS</b>	<b>702,917</b>	<b>16,535</b>
<b>CHANGE IN NET POSITION</b>	<b>\$ (75,608)</b>	<b>\$ (371)</b>
<b>NET POSITION RESTRICTED FOR PENSION BENEFITS AND OTHER POSTEMPLOYMENT BENEFITS (OPEB)</b>		
Beginning of the Year	\$7,509,926	\$10,631
End of the Year	\$7,434,318	\$10,260

The accompanying notes are an integral part of the financial statements.

(in thousands)

GROUP I TEACHERS OPEB PLAN 2016	GROUP I POLITICAL SUBDIVISIONS OPEB PLAN 2016	GROUP I STATE EMPLOYEES OPEB PLAN 2016	TOTAL 2016	TOTAL 2015
\$31,791	\$ 1,938	\$ 8,591	\$ 415,508	\$ 381,062
—	—	—	148	147
31,791	1,938	8,591	415,656	381,209
—	—	—	207,949	204,063
31,791	1,938	8,591	623,605	585,272
—	(61)	(50)	(73,079)	123,517
—	45	37	53,979	52,128
—	62	51	74,165	79,895
—	7	6	8,361	10,406
—	19	16	22,576	9,785
—	72	60	86,002	275,731
—	17	16	22,007	22,820
—	1	—	624	675
—	1	1	735	730
—	1	—	610	581
—	20	17	23,976	24,806
—	52	43	62,026	250,925
—	52	43	62,026	250,925
—	486	35	778	1,113
31,791	2,476	8,669	686,409	837,310
21,772	5,681	7,824	722,165	684,609
—	—	—	24,233	26,345
—	6	5	7,078	7,616
—	1	1	952	1,323
778	—	—	778	1,113
—	—	—	314	310
22,550	5,688	7,830	755,520	721,316
\$ 9,241	\$ (3,212)	\$ 839	\$ (69,111)	\$ 115,994
\$(13,724)	\$22,653	\$ 570	\$7,530,056	\$7,414,062
\$ (4,483)	\$19,441	\$ 1,409	\$7,460,945	\$7,530,056

**NOTES TO  
FINANCIAL STATEMENTS**

**NOTE 1 – NEW HAMPSHIRE RETIREMENT SYSTEM..... 31**

- Plan Description..... 31
- Pension Plan..... 31
- Other Postemployment Benefit Plans (OPEB Plans)..... 33

**NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS..... 34**

**NOTE 3 – INVESTMENTS & DEPOSITS.....34**

- Custodial Credit Risk – Deposits.....35
- Custodial Credit Risk – Investments..... 35
- Concentration of Credit Risk.....36
- Investment Concentration Risk..... 36
- Interest Rate Risk – Fixed Income Investments..... 36
- Effective Duration – Fixed Income Investments..... 36
- Credit Risk – Fixed Income Securities.....37
- Credit Quality Risk – Fixed Income Securities..... 37
- Foreign Currency Risk – Investments.....38
- Foreign Currency Risk – Non U.S. Investments..... 39
- Derivatives.....40
- Open Foreign Currency Exchange Contracts..... 41

**NOTE 4 – FAIR VALUE MEASUREMENTS OF INVESTMENTS.....42**

**NOTE 5 – FUNDING PROGRESS..... 44**

- Schedule of Funding Progress – OPEB Plans.....44

**NOTE 6 – NET PENSION LIABILITY OF EMPLOYERS – PENSION PLAN..... 45**

**NOTE 7 – SIGNIFICANT CHANGES IN ACTUARIAL ASSUMPTIONS AND BENEFIT PROVISIONS.....47**

**NOTE 8 – CONTRIBUTIONS AND RESERVES.....47**

- Pension Plan..... 47
- OPEB Plans.....48
- Total Amounts Contributed..... 48
- Total Amounts Contributed as a Percentage of Covered Payroll.....49

**NOTE 9 – ADMINISTRATIVE EXPENSES..... 49**

**NOTE 10 – CONTINGENT MATTERS.....49**

**NOTE 1 — NEW HAMPSHIRE RETIREMENT SYSTEM**

The New Hampshire Retirement System (NHRS) is a public employee retirement system that administers one cost-sharing multiple-employer defined benefit pension plan (Pension Plan) and four separate cost-sharing multiple-employer postemployment medical subsidy healthcare plans. Collectively the Pension Plan and the postemployment medical subsidy healthcare plans are hereafter referred to as the Plans.

NHRS is administered by a 13-member Board of Trustees that includes one employee member, one teacher member, one firefighter member, one police officer member, four employer representatives, four public members, and the State Treasurer. Trustees are fiduciaries bound by law to act solely in the interest of the participants and beneficiaries of the pension plan.

All trustees — with the exception of the State Treasurer, who serves as an ex officio member — are nominated by the governor for two-year terms and must be confirmed by a vote of the Executive Council. Any newly appointed or reappointed trustee must have familiarity with or experience in finance or business management.

The New Hampshire State Employees' Association, the New Hampshire Education Association, the New Hampshire Police Association, and the New Hampshire State Permanent Firemen's Association each submit a list of five active members of the retirement system from which the governor chooses a nominee to represent each of the four member groups.

The New Hampshire Municipal Association, the New Hampshire School Boards Association, and the New Hampshire Association of Counties each put forth a name to the governor for nomination as an employer trustee. The Governor also identifies and nominates one person to represent management of state employees.

The governor identifies and nominates the public member trustees, all of whom must be qualified persons with investment and/or financial experience who are not members of the retirement system. The public trustees must also have substantial experience in the field of institutional investment or finance such as educational background, business experience, and/or professional licensure and designations.

The governor is responsible to designate one of the public trustees to serve as chair of the board.

Although the assets of the Plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the plan's individual terms. Accordingly, the results of each plan are presented separately in the accompanying financial statements.

The administrative office of NHRS, which functions as a self-sustaining governmental entity, operates under a budget which is proposed by management, approved by the Board of Trustees, submitted under the budget preparation guidelines of the State of New Hampshire (State), and passed into law by the New Hampshire Legislature. NHRS participates as an employer in the Plans and its employees are members of the Plans.

In accordance with Governmental Accounting Standards Board (GASB) No. 14, as amended, the New Hampshire Retirement System is a component unit of the State. This determination was made on the basis of fiscal dependence on the State solely for budget oversight over certain administrative expenses. A copy of the State of New Hampshire's CAFR may be viewed at [www.admin.state.nh.us/accounting/](http://www.admin.state.nh.us/accounting/).

**PENSION PLAN**

The Pension Plan was established in 1967 by RSA 100-A:2 and is qualified as a tax-exempt organization under Sections 401(a) and 501(a) of the Internal Revenue Code. The Pension Plan is a contributory, defined benefit plan providing service, disability, death and vested retirement benefits to members and their beneficiaries. Substantially all full-time state employees, public school teachers and administrators, permanent firefighters and permanent police officers within the State are eligible and required to participate in the Pension Plan. Full-time employees of political subdivisions, including counties, municipalities and school districts, are also eligible to participate as a group if the governing body of the political subdivision has elected participation.

The type and number of employers contributing to the Pension Plan during the years ended June 30, 2016 and 2015 are presented below.

For GASB 67 disclosure purposes all State entities contributing to the pension plan are considered one employer.

<b>EMPLOYERS CONTRIBUTING</b>	<b>2016</b>	<b>2015</b>
State Government	1	1
City Governments	13	13
Town Governments and Related Entities	242	242
County Governments and Related Entities	12	12
School Districts and School Administrative Units	203	200
<b>Total Employers</b>	<b>471</b>	<b>468</b>

As of June 30, 2016 and 2015 membership data related to the Pension Plan was as follows:

<b>MEMBERSHIP DATA</b>	<b>2016</b>	<b>2015</b>
Retired plan members (or their beneficiaries) currently receiving benefits	32,776	31,350
Inactive members entitled to but not yet receiving benefits	11,313	10,689
Active members	48,069	47,812
<b>Total Membership</b>	<b>92,158</b>	<b>89,851</b>

The Pension Plan is divided into two membership groups. State and local employees and teachers belong to Group I. Police officers and firefighters belong to Group II. All assets are held in a single trust and are available to pay retirement benefits to all members. Benefits available to each membership group are summarized below.

Group I Members at age 60 qualify for a normal service retirement allowance based on years of creditable service and average final salary for the highest three years. Members commencing service on or after July 1, 2011 qualify for a normal service retirement allowance at age 65 based on years of creditable service and average final compensation for the highest five years. Members hired prior to July 1, 2011 with a non-vested status as of January 1, 2012 qualify for a normal service retirement allowance at age 60 based on years of creditable service and average final compensation for the highest five years. The yearly pension amount is 1/60 or 1.667% of average final compensation (AFC), multiplied by years of creditable service. AFC is defined as the average of the three or five highest salary years, and for benefit calculation purposes only, the final year's compensation cannot exceed by more than 150% the higher of the previous year's compensation or the compensation for the highest year used in the calculation of AFC (not including the final year's compensation). At age 65, the yearly pension amount is recalculated at 1/66 or 1.515% of AFC multiplied by years of creditable service. Members in service with 10 or more years of creditable service who are between age 50 and 60 or members in service with at least 20 years of creditable service, whose age plus service is equal to or greater than 70, are entitled to a retirement allowance with the appropriate graduated reduction based on years of creditable service. Members commencing service on or after July 1, 2011 at age 60 with 30 years of creditable service are entitled to a retirement allowance with the appropriate graduated reduction based on years of creditable service.

Group II Members who are age 60, or members who are at least age 45 with at least 20 years of creditable service, can receive a retirement allowance at a rate of 2.5% of AFC for each year of creditable service, not to exceed 40 years. Members commencing service on or after July 1, 2011 or members who have a non-vested status as of January 1, 2012 can receive a retirement allowance at age 52.5 with 25 years of 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 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  $\frac{1}{4}$  of 1% or age 60.

Members of both groups may qualify for vested deferred allowances, disability allowances and death benefit allowances subject to meeting various eligibility requirements. Benefits are based on AFC or earnable compensation and/or service.

Members are required to contribute a percentage of gross earnings to the Pension Plan as more fully described in Note 8. The percentage rates, established by state statute, are dependent upon member group classification. The deductions are made from member wages and are remitted by the employer to the Pension Plan on a monthly basis. If a member leaves employment prior to retirement or vesting, accumulated member contributions plus earned interest are refunded to the withdrawing member or to the designated beneficiary in the case of death. However, accumulated contributions plus interest of a non-vested, non-contributing member may remain in the Pension Plan and continue to earn interest. The interest credited to the inactive member's accumulated contributions will be 2 percentage points less than the assumed rate of return or the actual rate of return, whichever is less as reported in the preceding fiscal year's comprehensive annual financial report, but will not be less than zero.

Employers make monthly contributions to the Pension Plan based on rates determined by periodic actuarial valuations as more fully described in Note 8.

**OTHER POSTEMPLOYMENT BENEFIT PLANS (OPEB)**

Pursuant to RSA 100-A:52, RSA 100-A:52-a and RSA 100-A:52-b, the NHRS administers four defined benefit post-employment medical subsidy healthcare plans designated in statute by membership type. The four membership groups are Group II Police Officer and Firefighters, Group I Teachers, Group I Political Subdivision Employees and Group I State Employees. Collectively, they are referred to as the OPEB Plans.

The OPEB Plans provide a medical insurance subsidy to qualified retired members. The medical subsidy is a payment made by NHRS toward the cost of health insurance for a qualified retiree, his/her qualified spouse, and his/her certifiably dependent children with a disability who are living in the household and being cared for by the retiree. Under specific conditions, the qualified beneficiaries of members who die while in service may also be eligible for the medical subsidy. The eligibility requirements for receiving OPEB Plan benefits differ for Group I and Group II members. Detailed descriptions of those eligibility requirements can be found in the Actuarial Section beginning on page 74.

Membership of each OPEB plan consisted of the following eligible retirees receiving benefits as of June 30, 2016:

Plan	Number Of Retirees	1 Person Plan		2 Person Plan	
		Pre 65	Post 65	Pre 65	Post 65
Group II Police Officer & Firefighters	2,785	505	1,499	743	38
Group I Teachers	4,341	175	3,740	74	352
Group I Political Subdivision Employees	1,238	63	1,128	13	34
Group I State Employees	1,796	72	1,620	31	73
<b>Total OPEB Membership</b>	<b>10,160</b>	<b>815</b>	<b>7,987</b>	<b>861</b>	<b>497</b>

The number of contributing employers for the OPEB plans at June 30, 2016 is:

Group II Police Officer & Firefighters	203
Group I Teachers	195
Group I Political Subdivision Employees	417
Group I State Employees	6

Membership of each OPEB plan consisted of the following eligible retirees receiving benefits as of June 30, 2015:

Plan	Number Of Retirees	1 Person Plan		2 Person Plan	
		Pre 65	Post 65	Pre 65	Post 65
Group II Police Officer & Firefighters	2,718	582	1,430	669	37
Group I Teachers	4,411	309	3,681	90	331
Group I Political Subdivision Employees	1,272	95	1,129	15	33
Group I State Employees	1,864	96	1,654	41	73
<b>Total OPEB Membership</b>	<b>10,265</b>	<b>1,082</b>	<b>7,894</b>	<b>815</b>	<b>474</b>

The number of contributing employers for the OPEB plans at June 30, 2015 is:

Group II Police Officer & Firefighters	203
Group I Teachers	192
Group I Political Subdivision Employees	413
Group I State Employees	6

The maximum monthly subsidy amounts paid during fiscal year 2016 and 2015 were as follows:

For qualified retirees not eligible for Medicare the amounts were \$375.56 for a single person plan and \$751.12 for a two person plan. For those qualified retirees eligible for Medicare, the amounts were \$236.84 for a single person plan and \$473.68 for a two person plan. There have been no increases in the monthly maximum subsidy amounts payable since July 1, 2007.

Benefit provisions of the OPEB Plans can be amended only by legislative action taken by the New Hampshire State Legislature pursuant to the authority granted them under the New Hampshire State Constitution. The Legislature may cease providing the medical subsidy benefits under the OPEB Plans, for any reason, at any time.

**NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS****BASIS OF ACCOUNTING**

The System's financial statements are prepared using the accrual basis of accounting. Both plan member and employer contributions are recognized in the period in which the contributions are legally due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

The financial statements include prior-year summarized comparative information in total but not on a combining plan basis. Such summarized information is not intended to constitute sufficient detail to establish a presentation in accordance with GAAP and, accordingly, should be read in conjunction with the System's financial statements for the year ended June 30, 2015, from which the summarized information was derived.

**PRIOR YEAR RECLASSIFICATIONS**

Certain 2015 information has been reclassified to conform to the 2016 presentation. These reclassifications had no impact to the Net Position Held in Trust for Pensions and Other Post Employment Benefit.

**INVESTMENTS**

Investments are reported at fair value.

Investments in both domestic and non-U.S. securities are valued at current market prices and expressed in U.S. dollars. NHRS uses a trade-date accounting basis for these investments. Investments in non-registered commingled funds are valued at net asset value (NAV) as a practical expedient to estimate fair value.

Real estate includes investments in commingled funds. The financial statements for commingled funds are typically audited as of the calendar year-end. The NAVs for real estate investments recorded in this report were obtained from financial statements provided by the general partners of commingled funds. NAVs are used as a practical expedient to estimate fair value. Real estate commingled funds are selected by the System's discretionary real estate manager.

Alternative investments include investments in private equity, private debt and absolute return strategies. The NAVs for alternative investments recorded in this report were obtained from statements provided by the investment managers. These financial statements are typically audited as of the calendar year-end.

Cash and cash equivalents are valued at cost, which approximates fair value. Cash and cash equivalents primarily represent investments in the pooled short term investment fund managed by NHRS' master custodian. This fund invests mainly in high-grade money market instruments with maturities averaging less than three months. The fund provides daily liquidity.

The Plans hold no investments, either directly or indirectly, nor participates in any loans or leases, nor other party-in-interest transactions with any NHRS officials, New Hampshire State Government officials, or parties related to these officials.

**MONEY WEIGHTED RATE OF RETURN**

The annual money-weighted rate of return at June 30, 2016 was 0.9% and 3.4% for June 30, 2015. The return shows the investment performance net of fees and is adjusted for the timing of cash flows and the changing amounts actually invested.

**NEW ACCOUNTING PRONOUNCEMENT**

In fiscal year 2016, the System retrospectively implemented the provisions of GASB Statement No. 72 *Fair Value Measurement and Application* (GASB 72), which is effective for governmental entities with fiscal periods beginning after June 15, 2015.

Although adoption of this statement did not materially change the measurement of the System's assets and liabilities, it did enhance disclosures, which have also been applied to the comparable 2015 financial information.

**USE OF ESTIMATES**

Management of the System has made a number of estimates and assumptions relating to the reporting of assets and liabilities and in the disclosure of contingencies to prepare these financial statements in conformity with U.S. generally accepted accounting principles (GAAP). The System's most significant estimates relate to assumptions made about future events as part of the annual actuarial valuation process, and the valuation of alternative investments. Due to the inherent nature of these estimates, actual results could differ from those estimates.



**NOTE 3 — INVESTMENTS AND DEPOSITS**

RSA 100-A:15, I, provides separate and specific authorities to the Board of Trustees and the Independent Investment Committee for the management of the funds of the Plans and charges them with exercising the judgment and care under the circumstances then prevailing, which persons of prudence, discretion and intelligence, acting in a like capacity and familiar with such matters, would use in the conduct of a pension plan of like character and with like aims of the Plans.

To aid in the prudent investment of the Plans' assets, NHRS has adopted an Investment Manual which includes an investment policy. Primary components of the investment policy include the delineation of roles and responsibilities of the Board of Trustees, Independent Investment Committee, staff, and service providers; investment objectives; asset allocation policy; and asset class performance measurement and monitoring policy. This policy may be modified by the Board of Trustees as deemed necessary. In addition, the Investment Manual includes asset class guidelines which provide parameters for investment management.

Professional investment managers are bound by policy and contract to a standard of care that establishes a fiduciary relationship, to the extent permitted by law, requiring the manager to act prudently and solely in the best interest of the Plans and beneficiaries. Investment guidelines provide portfolio-level standards for separate account management including permissible investment types; security concentration thresholds; investment restrictions; and benchmarks for performance measurement and monitoring. NHRS utilizes a custodial bank compliance system to monitor the marketable investment portfolios against their respective guidelines.

The System's asset allocation as of June 30, 2016 and 2015, as recommended by the Independent Investment Committee and adopted by the Board of Trustees, is as follows:

<b>ASSET ALLOCATION</b>	<b>2016</b>		<b>2015</b>	
	<b>Target</b>	<b>Range</b>	<b>Target</b>	<b>Range</b>
<b>Asset Class:</b>				
Large Cap Equities	22.5%		22.5%	
Small/Mid Cap Equities	7.5%		7.5%	
<b>Total Domestic Equity</b>	<b>30.0%</b>	<b>20–50%</b>	<b>30.0%</b>	<b>20–50%</b>
Int'l Equities (Unhedged)	13.0%		13.0%	
Emerging Int'l Equities	7.0%		7.0%	
<b>Total International Equity</b>	<b>20.0%</b>	<b>15–25%</b>	<b>20.0%</b>	<b>15–25%</b>
Core Bonds	5.0%		5.0%	
Short Duration	2.0%		2.0%	
Global Multi-Sector Fixed Income	11.0%		11.0%	
Absolute Return Fixed Income	7.0%		7.0%	
<b>Total Fixed Income</b>	<b>25.0%</b>	<b>20–30%</b>	<b>25.0%</b>	<b>20–30%</b>
Private Equity	5.0%		5.0%	
Private Debt	5.0%		5.0%	
Opportunistic	5.0%		5.0%	
<b>Total Alternative Investments</b>	<b>15.0%</b>	<b>0–25%</b>	<b>15.0%</b>	<b>0–25%</b>
Real Estate	10.0%		10.0%	
<b>Total Real Estate</b>	<b>10.0%</b>	<b>5–20%</b>	<b>10.0%</b>	<b>5–20%</b>
<b>TOTAL</b>	<b>100.0%</b>		<b>100.0%</b>	

**CUSTODIAL CREDIT RISK — DEPOSITS**

Custodial credit risk for deposits is the risk that in an event of a bank failure, deposits may not be recovered. NHRS does not have a deposit policy to manage custodial credit risk on deposits.

At June 30, 2016 and June 30, 2015, NHRS held deposits of \$6.7 million and \$5.3 million, respectively, in the local custodian bank. These deposits are fully insured or collateralized and are used to support the daily working capital needs of NHRS.

**CUSTODIAL CREDIT RISK — INVESTMENTS**

Investment securities are exposed to custodial credit risk if the investment securities are uninsured, are not registered in the name of the Plans, and are held by either:

- a. The counterparty to a transaction or
- b. The counterparty's trust department or agent but not in the Plans' name.

All of the System's securities are held by the System's bank in the System's name.

### CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss attributable to the magnitude of the Plans' investments in a single issuer. NHRS policy is expressed through individual separate account manager guidelines which limit investments in a single issuer to 10%, or less, of the portfolio value in order to control the overall risk of loss on a total portfolio level. This threshold is set as an upper limit, and in actual practice, managers generally do not reach this limit. Certain securities may be excluded from this limitation due to the nature of the investments (such as U.S. government securities, government-sponsored enterprise obligations, and supranational debt). NHRS fixed income managers have consistently adhered to the established guidelines for issuer concentration. The fixed income commingled fund managers have established investment guidelines regarding concentration of credit risk. The total portfolio is broadly-diversified across equities, fixed income, cash equivalent securities, real estate and alternative investments. Due to this diversification, the concentration of credit risk in a single issuer is below 5% at the total portfolio level.

### INTEREST RATE RISK – FIXED INCOME INVESTMENTS

Interest rate risk is the effect on the fair value of fixed income investments from changes in interest rates. Duration measures a debt investment's change in fair value arising from a change in interest rates.

Interest rate risk is illustrated below using the effective duration or option-adjusted methodology. This methodology is widely-used in the management of fixed income portfolios to quantify the risk associated with interest rate changes. The effective duration methodology takes into account the most likely timing and magnitude of variable cash flows, such as callable options, prepayments and other factors, and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve.

The NHRS policy on duration is expressed through individual portfolio guidelines with each investment manager in lieu of a broad, plan-level policy. Duration guidelines have been established with each fixed income manager in order to manage interest rate risk within the separate account portfolios. The fixed income commingled fund managers also have established investment guidelines regarding duration. These provisions specify that the duration of each individual fixed income portfolio will be managed within a specified percentage or number of years relative to its benchmark index. NHRS fixed income managers follow the established guidelines for duration. If there is an occasional exception, the manager prudently remedies the guideline breach.

The following effective duration tables quantify the interest rate risk of the Plans' fixed income assets at June 30, 2016 and 2015:

### EFFECTIVE DURATION – FIXED INCOME INVESTMENTS

(dollars in thousands)

AT JUNE 30, 2016

Investment Type	Fair Value June 30, 2016	Percentage of Fixed Income Investments	Effective Duration in Years	Weighted Average Effective Duration in Years
Collateralized/Asset Backed Obligations	\$ 172,043	9.7%	4.4	0.4
Corporate Bonds	622,956	35.3%	5.7	2.0
Government and Agency Bonds	559,737	31.7%	5.8	1.8
Commingled Fund	204,997	11.6%	4.5	0.52
Commingled Fund	205,679	11.7%	3.5	0.4
<b>Totals</b>	<b>\$ 1,765,412</b>	<b>100.0%</b>		<b>5.2</b>

**EFFECTIVE DURATION — FIXED INCOME INVESTMENTS  
AT JUNE 30, 2015**

(dollars in thousands)

Investment Type	Fair Value June 30, 2015	Percentage of Fixed Income Investments	Effective Duration in Years	Weighted Average Effective Duration in Years
Collateralized/Asset Backed Obligations	\$ 192,791	11.6%	4.4	0.5
Corporate Bonds	541,735	32.6%	5.7	1.9
Government and Agency Bonds	528,210	31.8%	5.8	1.8
Commingled Fund	204,102	12.2%	(0.06)	(0.01)
Commingled Fund	196,253	11.8%	3.8	0.4
<b>Totals</b>	<b>\$ 1,663,091</b>	<b>100.0%</b>		<b>4.6</b>

**CREDIT RISK — FIXED INCOME SECURITIES**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations.

NHRS controls credit risk on debt securities by establishing requirements for average credit quality at the separate account portfolio level and through credit quality standards for individual securities. The NHRS policy on credit quality is expressed through individual portfolio guidelines with each investment manager in lieu of a broad, plan-level policy. The investment guidelines are customized to the individual manager's strategy. NHRS fixed income managers follow established guidelines for credit quality. If there is an occasional exception, the manager prudently remedies the guideline breach. NHRS applies standards with regard to securities rated by nationally recognized statistical rating organizations ("NRSRO") and uses the lowest agency ratings for evaluating the credit quality of a specific security. The fixed income commingled fund managers have established investment guidelines regarding credit risk.

The following schedules illustrate the Plans' fixed income investments as of June 30, 2016 and 2015, including the distribution of those investments by Standard & Poor's quality credit ratings:

**CREDIT QUALITY RISK — FIXED INCOME SECURITIES AT JUNE 30, 2016**

(in thousands)

Investment Type	Fair Value June 30, 2016	Quality Ratings <sup>1</sup>				
		AAA	AA	A	BBB or Lower	Unrated
Collateralized/Asset Backed Obligations	\$ 172,043	\$ 89,585	\$ 27,801	\$ 15,725	\$ 25,483	\$13,449
Corporate Bonds	622,956	8,973	55,529	123,373	433,634	1,447
Government and Agency Bonds <sup>2</sup>	273,424	45,116	64,101	76,576	70,672	16,959
Commingled Fund <sup>3</sup>	204,997	—	—	204,997	—	—
Commingled Fund <sup>3</sup>	205,679	—	205,679	—	—	—
<b>Totals</b>	<b>\$1,479,099</b>	<b>\$143,674</b>	<b>\$353,110</b>	<b>\$420,671</b>	<b>\$529,789</b>	<b>\$31,855</b>
<b>Percent of Total Fair Value</b>		<b>9.71%</b>	<b>23.87%</b>	<b>28.44%</b>	<b>35.82%</b>	<b>2.15%</b>

<sup>1</sup>Ratings were derived primarily from Standard & Poor's (S&P). In instances where S&P did not rate a security, the Moody's rating was used.

<sup>2</sup>Government and Agency Bonds exclude U.S. government securities and securities explicitly guaranteed by the U.S. government (\$286,313) because these securities are not considered to have credit risk.

<sup>3</sup>Average credit quality rating for the commingled funds was provided by GAM and Manulife respectively.

**CREDIT QUALITY RISK – FIXED INCOME SECURITIES AT JUNE 30, 2015**

(in thousands)

Investment Type	Quality Ratings <sup>1</sup>					
	Fair Value June 30, 2015	AAA	AA	A	BBB or Lower	Unrated
Collateralized/Asset Backed Obligations	\$ 192,791	\$108,174	\$ 23,953	\$ 16,291	\$ 37,201	\$ 7,172
Corporate Bonds	541,735	7,403	35,745	175,308	322,618	661
Government and Agency Bonds <sup>2</sup>	262,688	45,390	53,689	71,768	79,064	12,777
Commingled Fund <sup>3</sup>	204,102	—	204,102	—	—	—
Commingled Fund <sup>3</sup>	196,253	—	—	196,253	—	—
<b>Totals</b>	<b>\$1,397,569</b>	<b>\$160,967</b>	<b>\$317,489</b>	<b>\$459,620</b>	<b>\$438,883</b>	<b>\$20,610</b>
<b>Percent of Total Fair Value</b>		<b>11.52%</b>	<b>22.72%</b>	<b>32.89%</b>	<b>31.40%</b>	<b>1.47%</b>

<sup>1</sup>Ratings were derived primarily from Standard & Poor's (S&P). In instances where S&P did not rate a security, the Moody's rating was used.

<sup>2</sup>Government and Agency Bonds exclude U.S. government securities and securities explicitly guaranteed by the U.S. government (\$265,522) because these securities are not considered to have credit risk.

<sup>3</sup>Average credit quality rating for the commingled funds was provided by GAM and Manulife respectively.

Investments in asset-backed and mortgage-backed securities are reported at fair value. Although not generally considered to be derivatives, asset-backed and mortgage-backed securities receive cash flows from interest and principal payments on the underlying assets and mortgages. As a result, they are exposed to prepayment risk. As of June 30, 2016 and 2015, the Plans' combined investment in asset-backed and mortgage-backed securities held in separate account portfolios totaled \$129.9 million and \$146.1 million, respectively.

**FOREIGN CURRENCY RISK – INVESTMENTS:**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment.

NHRS manages its foreign currency risk primarily through its strategic asset allocation policy. As of June 30, 2016, investments in non-U.S. equity securities have a target asset allocation of 20% of total investments with a target range of 15–25%. As of June 30, 2016, non-U.S. fixed income securities represent 3.3% of the total investments as a result of the managers' security selection process. Non-U.S. investments are permitted in the alternative investment asset class, which includes private equity, private debt and absolute return strategy investments. The target allocation for alternative investments is 15% and the NHRS investment policy does not set limits for foreign investments in this asset class. The target allocation for real estate investments is 10%, and up to 35% of the Plans' real estate allocation may be invested in non-U.S. investments.

In addition, foreign currency risk is mitigated through the investment guidelines. NHRS manages its foreign exposure by requiring that separate account managers diversify their non-U.S. portfolios by country, sector and issuer to limit both foreign currency risk and security risk. Managers of commingled funds have discretion over their respective investment guidelines which must be consistent with strategies approved by the NHRS. In certain instances, where permitted in the investment guidelines, investment managers may also use foreign currency forward contracts to hedge against foreign currency risk.

The Plans' exposure to foreign currency risk at June 30, 2016 and 2015 is presented on the following schedules:

**FOREIGN CURRENCY RISK — NON-U.S. INVESTMENTS** (in thousands)  
**AS OF JUNE 30, 2016**

Currency	Equity*	Fixed Income	Real Estate & Alternative Investments	Cash and Cash Equivalents	Totals
Argentine Peso	\$ —	\$ —	\$ —	\$ 2	\$ 2
Australian dollar	11,983	29,469	—	—	41,452
Brazilian real	2,844	20,607	—	—	23,451
British pound sterling	102,611	17,533	6,894	18	127,056
Canadian dollar	12,335	21,135	—	—	33,470
Danish krone	12,244	—	—	—	12,244
Euro	167,017	14,621	49,905	46	231,589
Hong Kong dollar	50,196	—	—	—	50,196
Hungarian forint	—	12,209	—	—	12,209
Indonesian rupiah	2,551	14,800	—	—	17,351
Japanese yen	82,867	—	20,118	979	103,964
Malaysian ringgit	—	14,262	—	—	14,262
Mexican new peso	1,345	55,454	—	—	56,799
New turkish lira	2,655	—	—	—	2,655
New Zealand dollar	—	25,803	—	—	25,803
Norwegian krone	—	4,775	—	—	4,775
Polish zloty	—	6,657	—	—	6,657
South African rand	—	10,011	—	—	10,011
South Korean won	15,504	—	—	—	15,504
Swedish krona	6,185	—	—	—	6,185
Swiss franc	75,953	—	—	—	75,953
Turkish lira	1,177	—	—	—	1,177
<b>Total investments subject to foreign currency risk</b>	<b>\$547,467</b>	<b>\$247,336</b>	<b>\$76,917</b>	<b>\$ 1,045</b>	<b>\$ 872,765</b>

\*NHRS also invests in commingled funds where foreign currency risk information is not available. As a result, totals for equity shown on this schedule will not match the total non-U.S. equity shown on the Combining Statements of Fiduciary Net Position.

**FOREIGN CURRENCY RISK — NON-U.S. INVESTMENTS**  
**AS OF JUNE 30, 2015**

(in thousands)

Currency	Equity*	Fixed Income	Real Estate & Alternative Investments	Cash and Cash Equivalents	Totals
Argentine peso	\$ —	\$ —	\$ —	\$ 3	\$ 3
Australian dollar	10,107	29,139	—	—	39,246
Brazilian real	2,991	16,835	—	—	19,826
British pound sterling	116,907	432	9,792	37	127,168
Canadian dollar	13,029	22,079	—	—	35,108
Danish krone	15,830	—	—	—	15,830
Euro	185,704	28,538	11,272	—	225,514
Hong Kong dollar	71,976	—	—	—	71,976
Hungarian forint	—	11,771	—	—	11,771
Indonesian rupiah	2,423	13,966	—	—	16,389
Japanese yen	85,199	—	18,549	65	103,813
Malaysian ringgit	—	8,683	—	—	8,683
Mexican new peso	1,940	55,852	—	—	57,792
New turkish lira	1,393	—	—	—	1,393
New Zealand dollar	—	23,863	—	—	23,863
Norwegian krone	—	5,223	—	—	5,223
Polish zloty	—	6,711	—	—	6,711
Singapore dollar	5,138	—	—	—	5,138
South African rand	—	12,791	—	—	12,791
South Korean won	14,930	13,778	—	—	28,708
Swedish krona	9,830	—	—	—	9,830
Swiss franc	95,568	—	—	—	95,568
<b>Total investments subject to foreign currency risk</b>	<b>\$632,965</b>	<b>\$249,661</b>	<b>\$39,613</b>	<b>\$105</b>	<b>\$ 922,344</b>

\*NHRS also invests in commingled funds where foreign currency risk information is not available. As a result, totals for equity shown on this schedule will not match the total non-U.S. equity shown on the Combining Statements of Fiduciary Net Position.

**DERIVATIVES**

Derivative instruments are contracts whose values are based on the valuation of an underlying asset, reference rate or index. Derivatives include futures, options, forward contracts and forward foreign currency exchanges. NHRS managers may enter into certain derivative instruments primarily to enhance the efficiency and reduce the volatility of the portfolio. As of June 30, 2016, there was \$2.6 million invested in equity futures and there were no investments in options within the separate account portfolios. As of June 30, 2015, there was \$7.6 million invested in equity futures and there were no investments in options within the separate account portfolios. The NHRS investment policy and certain investment manager guidelines allow for the use of derivative instruments. The use of futures, options, or forward contracts is not permitted for any speculative hedging or leveraging of the portfolios and is prohibited in separate account mandates. Managers of commingled funds have discretion over their respective investment guidelines which may allow for the use of derivative instruments.

The Plans could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. To mitigate this risk, investment managers conduct assessments of their counterparties and utilize exchanges which have trading standards.

NHRS managers may use futures, options, and foreign currency exchange contracts in order to manage currency risk or initiate transactions in non-U.S. investments. NHRS may be positively or negatively impacted by foreign currency risk due to fluctuations in the value of different currencies. The Plans could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. To mitigate this risk, investment managers conduct assessments of their counterparties and utilize exchanges which have trading standards. The fair value of open foreign currency exchange contracts including unrealized appreciation or depreciation is recorded on the Statements of Net Plan Assets as Due from Brokers for Securities Sold and as Due to Brokers for Securities Purchased.

Foreign currency exchange contracts open at June 30, 2016 and 2015 are shown below and on the following page:

**OPEN FOREIGN CURRENCY EXCHANGE CONTRACTS  
AT JUNE 30, 2016**

(in thousands)

	Local Currency Amount	Effective Date	Maturity Date	Original Foreign Exchange Rate	Unrealized Appreci- ation	Unrealized (Depre- ciation)
<b>Foreign currency exchange contracts purchased:</b>						
Chilean Peso	3,498,200	3/4/16	7/8/16	689.400000 CLP / USD	208	—
Chilean Peso	1,266,000	5/11/16	8/19/16	684.900000 CLP / USD	56	—
Chilean Peso	2,720,000	5/24/16	9/26/16	700.900000 CLP / USD	198	—
Chilean Peso	3,010,000	6/8/19	10/21/16	679.920000 CLP / USD	76	—
Chilean Peso	3,719,000	6/21/16	11/7/16	683.870000 CLP / USD	117	—
Euro	12,030	5/6/16	8/10/16	1.1457150 EUR / USD	—	(401)
Euro	390	5/9/16	8/10/16	1.141540 EUR / USD	—	(11)
Euro	2,030	5/10/16	8/10/16	1.140195 EUR / USD	—	(56)
Euro	1,570	5/12/16	8/10/16	1.141040 EUR / USD	—	(45)
Euro	640	6/28/16	8/10/16	1.110820 EUR / USD	—	—
Euro	60	6/29/16	7/1/16	0.900576 EUR / USD	—	—
Euro	206	6/30/16	7/1/16	0.904857 EUR / USD	1	—
Euro	7	6/30/16	7/5/16	0.904756 EUR / USD	—	—
Japanese Yen	55,561	6/28/16	7/1/16	102.337500 JPY / USD	—	(1)
Japanese Yen	22,149	6/29/16	7/1/16	102.672000 JPY / USD	—	—
Japanese Yen	3,301	6/30/16	7/5/16	102.764000 JPY / USD	—	—
Indian Rupee	1,034,000	6/9/16	9/21/16	67.771000 INR / USD	—	(137)
Norwegian Krone	74,900	4/14/16	7/13/16	8.23065 NWK / USD	—	(149)
Swedish Krona	824	6/30/16	7/1/16	8.492420 SWK / USD	—	—
Swedish Krona	53,200	4/28/16	7/14/16	8.043700 SWK / USD	—	(332)
Swedish Krona	50,100	4/15/16	7/14/16	8.103800 SWK / USD	—	(267)
Swedish Krona	82,800	5/17/16	8/22/16	8.205350 SWK / USD	—	(298)
Swiss Franc	46	6/30/16	7/1/16	0.9785880 CHF / USD	—	—
<b>Foreign currency exchange contracts sold:</b>						
Japanese Yen	112	6/29/16	7/5/16	0.009748 USD / JPY	—	—
Japanese Yen	110	6/28/16	7/1/16	0.009748 USD / JPY	—	—
Japanese Yen	929	6/30/16	7/5/16	0.009748 USD / JPY	—	(6)
Japanese Yen	113	6/30/16	7/5/16	0.009748 USD / JPY	—	—
Pound Sterling	264	6/29/16	7/1/16	1.336800 USD / GBP	2	—
Pound Sterling	827	6/29/16	7/1/16	1.336800 USD / GBP	4	—
Pound Sterling	454	6/30/16	7/5/16	1.336806 USD / GBP	—	(4)
Pound Sterling	1,293	6/30/16	7/5/16	1.336806 USD / GBP	—	(14)
<b>Totals</b>					<b>\$662</b>	<b>\$(1,721)</b>



**OPEN FOREIGN CURRENCY EXCHANGE CONTRACTS  
AT JUNE 30, 2015**

(in thousands)

	Local Currency Amount	Effective Date	Maturity Date	Original Foreign Exchange Rate	Unrealized Appreci- ation	Unrealized (Depreci- ation)
Foreign currency exchange contracts purchased:						
Chilean Peso	3,719,000	3/12/15	7/24/15	641.000000 CLP / USD	2	—
Chilean Peso	3,498,200	4/8/15	8/10/15	617.700000 CLP / USD	—	(213)
Chilean Peso	1,266,000	5/5/15	9/16/15	618.400000 CLP / USD	—	(82)
Chilean Peso	2,720,000	5/26/15	9/28/15	619.580000 CLP / USD	—	(172)
Chilean Peso	3,010,000	6/17/15	10/19/15	645.100000 CLP / USD	—	(6)
Euro	136	6/29/15	7/2/15	1.1207000 EUR / USD	—	—
Euro	191	6/30/15	7/2/15	1.115100 EUR / USD	—	—
Euro	600	6/26/15	7/8/15	1.120319 EUR / USD	—	(4)
Euro	2,660	6/3/15	8/12/15	1.128010 EUR / USD	—	(35)
Hong Kong dollar	339	6/29/15	7/2/15	7.752200 HKD / USD	—	—
Hong Kong dollar	138	6/30/15	7/2/15	7.752508 HKD / USD	—	—
Indian Rupee	980,000	6/11/15	9/16/15	65.090000 INR / USD	155	—
Japanese Yen	35,203	6/22/15	7/1/15	123.016700 JPY / USD	1	—
Norwegian Krone	74,900	4/16/15	7/20/15	7.79940 NOK / USD	—	(87)
Swedish Krona	82,800	4/16/15	7/20/15	8.638460 SEK / USD	397	—
Swiss Franc	62	6/29/15	7/1/15	0.9264000 CHF / USD	—	—
Swiss Franc	58	6/30/15	7/2/15	0.9347000 CHF / USD	—	—
Foreign currency exchange contracts sold:						
Euro	29,058	5/7/15	8/12/15	1.114807 USD / EUR	452	—
Japanese Yen	26	6/26/15	7/1/15	0.008172 USD / JPY	—	—
New Zealand dollar	10,172	4/13/15	7/16/15	0.675476 USD / NZD	856	—
<b>Totals</b>					<b>\$1,863</b>	<b>\$(599)</b>

**NOTE 4 FAIR VALUE MEASUREMENTS OF INVESTMENTS**

In accordance with GASB 72, except for investments measured using NAV as a practical expedient to estimate fair value, the System categorizes the fair value measurements of its investments within the fair value hierarchy established by U.S. GAAP. The fair value hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

- Level 1 – Inputs that reflect quoted prices (unadjusted) in active markets for identical assets or liabilities that the fund has the ability to access at the measurement date. Most of the System's directly held marketable equity securities would be examples of Level 1 investments.
- Level 2 – Inputs other than quoted prices that are observable for an asset or liability either directly or indirectly, including inputs in markets that are not considered to be active. Because they must often be priced on the basis of transactions involving similar but not identical securities or do not trade with sufficient frequency, certain directly held fixed income securities are categorized in Level 2.
- Level 3 – Unobservable inputs based on the best information available, using assumptions in determining the fair value of investments and derivative financial instruments. The System had no level 3 investments as of June 30, 2016 and 2015.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. In certain instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Investments are reported at fair value. If an investment is held directly by the System and an active market with quoted prices exists, such as for domestic equity securities, the market price of an identical security is used to report fair value and is classified in Level 1. Corporate fixed income securities and certain government securities utilize pricing that may involve estimation using similar securities or trade dates and are classified in Level 2. Fair values for shares in registered mutual funds and exchange-traded funds are based on published share prices and classified in Level 1. Investments in real estate, private equity and private debt funds are generally reported at the net asset value (NAV) reported by the fund managers and assessed as reasonable by the System, which is used as a practical expedient to estimate the fair value



of the System's interest therein, unless it is probable that all or a portion of the investment will be sold for an amount different from NAV. At June 30, 2016 and 2015 the System had no plans or intentions to sell investments at amounts different from NAV.

NAVs determined by fund managers generally consider variables such as operating results, pricing from market exchanges, comparable earnings multiples, projected cash flows, recent sales prices, and other pertinent information, and may reflect discounts for the illiquid nature of certain investments held. Because of the inherent uncertainties of valuation, the estimated fair values used in NAV calculations may differ significantly from values that would have been used had a ready market existed, and the differences could be material.

<b>2016</b>						
<b>Fair Value Measurements Using</b>						
(in thousands)						
Investments at Fair Value	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value (NAV)	Unfunded Commitments
<b>Short-term:</b>						
Cash and Cash Equivalents	\$ 140,787	\$ 140,787	\$ —	\$—	\$ —	\$ —
<b>Fixed Income:</b>						
U.S Government Obligations (1)	286,313	246,469	39,844	—	—	—
Domestic Fixed Income (2)	821,087	5,904	815,183	—	—	—
Commingled Funds (3)	410,676	—	—	—	410,676	—
International Fixed Income (4)	247,336	—	247,336	—	—	—
<b>Equity:</b>						
Domestic Equity Securities	2,590,619	2,587,812	2,807	—	—	—
Commingled Funds (5)	544,447	—	—	—	544,447	—
International Equity Securities	558,515	558,515	—	—	—	—
<b>Real Estate:</b>						
Real Estate Funds (6)	787,937	—	—	—	787,937	111,172
<b>Alternative Investments:</b>						
Private Equity (7)	453,602	—	—	—	453,602	615,073
Private Debt (8)	324,961	—	—	—	324,961	194,325
Opportunistic (9)	206,410	—	—	—	206,410	—
<b>Total Investments</b>	<b>\$7,372,690</b>	<b>\$3,539,487</b>	<b>\$1,105,170</b>	<b>\$—</b>	<b>\$2,727,992</b>	<b>\$920,570</b>

<b>2015</b>						
<b>Fair Value Measurements Using</b>						
(in thousands)						
Investments at Fair Value	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value (NAV)	Unfunded Commitments
<b>Short-term:</b>						
Cash and Cash Equivalents	\$ 171,369	\$ 171,369	\$ —	\$—	\$ —	\$ —
<b>Fixed Income:</b>						
U.S Government Obligations (1)	265,523	197,631	67,892	—	—	—
Domestic Fixed Income (2)	747,551	5,025	742,526	—	—	—
Commingled Funds (3)	400,356	—	—	—	400,356	—
International Fixed Income (4)	249,661	—	249,661	—	—	—
<b>Equity:</b>						
Domestic Equity Securities	2,982,939	2,980,177	2,762	—	—	—
Commingled Funds (5)	593,411	—	—	—	593,411	—
International Equity Securities	644,101	644,101	—	—	—	—
<b>Real Estate:</b>						
Real Estate Funds (6)	676,603	—	—	—	676,603	102,000
<b>Alternative Investments:</b>						
Private Equity (7)	310,576	—	—	—	310,576	512,945
Private Debt (8)	203,728	—	—	—	203,728	123,730
Opportunistic (9)	214,839	—	—	—	214,839	—
<b>Total Investments</b>	<b>\$7,460,657</b>	<b>\$3,998,303</b>	<b>\$1,062,841</b>	<b>\$—</b>	<b>\$2,399,513</b>	<b>\$738,675</b>

(1) Fiscal 2016 rates range from 0.625% to 6.770%, and maturities from 2017 to 2046. Fiscal 2015 rates range from 0.250% to 6.770%, and maturities from 2015 to 2045.

(2) Fiscal 2016 rates range from 0.00% to 10.500%, and maturities from 2016 to 2057. Fiscal 2015 rates range from 0.875% to 11.000%, and maturities from 2015 to 2066.

(3) This represents investments in two commingled fixed income funds that invest globally in both developed and emerging markets with investments consisting primarily of corporate bonds (investment grade and high yield), sovereign bonds and securitized bonds. These funds may also invest in convertible bonds and currencies. The redemption frequency for these investments range from daily to monthly with one to 30 business days' prior written notice.

- (4) Fiscal 2016 rates range from 0.250% to 10.250%, and maturities from 2016 to 2064. Fiscal 2015 rates range from 0.250% to 10.250%, and maturities from 2015 to 2050.
- (5) This represents investments in four commingled equity funds in fiscal 2016 and five in fiscal 2015 that invest primarily in common stock of companies located outside the U.S., including emerging markets. These investments have daily liquidity and require up to 10 business days' notice for redemption.
- (6) This represents investments in 45 funds consisting of 10 open-end funds and 35 closed-end funds. The open-end funds can be redeemed on a quarterly basis with 45-90 days' notice periods. The closed-end funds are not redeemable and are expected to be liquidated between 2016 and 2025. Beginning in 2010, the System's real estate portfolio was restructured from direct property holdings to a diversified portfolio of funds. As such, 40 of the 45 fund investments have been made during the period from 2010 to 2016.
- (7) This represents 30 investments in private partnerships focused primarily on the following strategies: buyouts, growth equity, secondaries and energy. These private partnerships typically have 10 to 15 year life cycles during which limited partners are unable to redeem their positions, but instead, receive distributions as the partnerships liquidate their underlying assets.
- (8) This represents 16 investments in private partnerships focused primarily on the following strategies: direct lending, mezzanine and distressed debt. These private partnerships typically have 10 to 15 year life cycles during which limited partners are unable to redeem their positions, but instead, receive distributions from coupon payments and/or as the partnerships liquidate their underlying asset.
- (9) SLI GARS is held within the Opportunistic sleeve of the Alternative Investments asset allocation as SLI GARS is an "unconstrained/go anywhere" manager that invests across various geographies and asset classes including equity, credit, interest rates, currencies and real estate. This manager invests on an opportunistic basis to take advantage of market dislocations.

**NOTE 5 – FUNDING PROGRESS – OPEB PLANS**

**SCHEDULE OF FUNDING PROGRESS – OPEB PLANS**

(\$ in thousands)

The funding status of the OPEB Plans is as follows:

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 Percentage of Covered Payroll ([b-a]/c)
<b>Group II – Police Officers &amp; Firefighters</b>						
06/30/16	\$ 10,539	\$347,619	\$337,080	3.0%	\$ 399,331	84.4%
06/30/15	\$ 10,306	\$313,933	\$303,627	3.3%	\$ 396,818	76.5%
06/30/14	\$ 9,401	\$331,744	\$322,343	2.8%	\$ 385,524	83.6%
06/30/13	\$ 8,686	\$337,097	\$328,411	2.6%	\$ 382,563	85.8%
06/30/12	\$ 8,813	\$336,241	\$327,428	2.6%	\$ 374,321	87.5%
<b>Group I – Teachers</b>						
06/30/16	(\$ 4,605)*	\$251,661	\$256,266	(1.8%)	N/A	N/A
06/30/15	(\$ 13,305)	\$229,404	\$242,709	(5.8%)	N/A	N/A
06/30/14	(\$ 11,248)	\$238,681	\$249,929	(4.7%)	N/A	N/A
06/30/13	(\$ 10,314)	\$245,465	\$255,779	(4.2%)	N/A	N/A
06/30/12	(\$ 9,097)	\$254,850	\$263,947	(3.6%)	N/A	N/A
<b>Group I – Political Subdivision Employees</b>						
06/30/16	\$ 19,968	\$ 57,462	\$ 37,494	34.7%	N/A	N/A
06/30/15	\$ 21,961	\$ 58,609	\$ 36,648	37.5%	N/A	N/A
06/30/14	\$ 22,767	\$ 65,506	\$ 42,739	34.8%	N/A	N/A
06/30/13	\$ 23,356	\$ 67,667	\$ 44,311	34.5%	N/A	N/A
06/30/12	\$ 25,519	\$ 73,254	\$ 47,735	34.8%	N/A	N/A
<b>Group I – State Employees</b>						
06/30/16	\$ 1,448	\$ 73,389	\$ 71,941	2.0%	N/A	N/A
06/30/15	\$ 553	\$ 73,716	\$ 73,163	0.7%	N/A	N/A
06/30/14	\$ 325	\$ 78,172	\$ 77,847	0.4%	N/A	N/A
06/30/13	\$ 95	\$ 81,643	\$ 81,548	0.1%	N/A	N/A
06/30/12	(\$ 917)	\$ 88,414	\$ 89,331	(1.0%)	N/A	N/A

\*The Group I Teachers OPEB plan currently has a negative balance due to higher than anticipated retirement rates, lower than expected payroll growth and the lag of when contribution rates are set vs. when they become effective. Although this is a closed group, meaning members who are currently working and contributing will not qualify for this benefit, this plan continues to pay benefits to retirees who were eligible for this benefit at the time of their retirement. This negative balance has been addressed and is currently being collected through higher contribution rates.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and pension and healthcare cost trends. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The table below summarizes the actuarial methods and assumptions used for completing the actuarial valuation on the OPEB plans.

Methods and Assumptions	OPEB Plans
Valuation Date	06/30/2016
Actuarial Cost Method	Entry age normal
Amortization Method	Level percentage of payroll, closed
Equivalent single amortization period	14 years*
Asset valuation method	5-year smoothed market
<b>Actuarial Assumptions:</b>	
Investment rate of return*	3.25%
Projected salary increases*	3.75% to 25.25%
*Includes Price Inflation at	2.5%
Rate of Payroll Growth	3.25%
Valuation Health Care Trend Rate	N/A — The OPEB Plans provide a specific dollar subsidy to be used for health care. The subsidy increased 8.0% for fiscal year 2007 by statute. There have been no annual increases since July 1, 2007

\*The ARC is based on the greater of a 20-year amortization period or the amount necessary to meet cash flow. The equivalent single amortization period shown is based on the total 401(h) contributions.

The Schedule of Employer Contributions provided in required supplementary information presents trend information about the amounts contributed to the plans by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an on-going basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between employer and plan members to that point.

The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. Additional information can be found in the actuarial section of this report.

#### NOTE 6 — NET PENSION LIABILITY OF EMPLOYERS — PENSION PLAN

The net pension liability of employers as of June 30 is shown below:

SCHEDULE OF NET PENSION LIABILITY OF EMPLOYERS				(\$ in thousands)
Fiscal Year Ended	(a) Total Pension Liability	(b) Plan Net Position	(c) Net Pension Liability (a-b)	(d) Plan Net Position as a % of Total Pension Liability (b/a)
6/30/2016	\$12,751,913	\$7,434,318	\$5,317,595	58.3%
6/30/2015	\$11,471,453	\$7,509,926	\$3,961,527	65.5%
6/30/2014	\$11,144,214	\$7,390,628	\$3,753,586	66.3%
6/30/2013	\$10,708,768	\$6,404,984	\$4,303,784	59.8%

#### ACTUARIAL ASSUMPTIONS

The total pension liability as of June 30, 2016 is based on an actuarial valuation performed as of June 30, 2015 rolled forward to the measurement date of June 30, 2016. The roll-forward procedure increases the June 30, 2015 actuarial accrued liability with normal cost and interest and decreases it with actual benefit payments and administrative expenses paid.

The asset allocation is recommended by the Independent Investment Committee and approved by the Board of Trustees. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided. The following table displays the approved asset allocation for 2016 and the geometric real rates of return for each asset class:

**LONG-TERM EXPECTED REAL RATE OF RETURN\***

Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return
		2016
Large Cap Equities	22.50%	4.25%
Small/Mid Cap Equities	7.50%	4.50%
<b>Total Domestic Equity</b>	<b>30.00%</b>	
Int'l Equities (unhedged)	13.00%	4.75%
Emerging Int'l Equities	7.00%	6.25%
<b>Total International Equity</b>	<b>20.00%</b>	
Core Bonds	5.00%	0.64%
Short Duration	2.00%	-0.25%
Global Multi-Sector Fixed Income	11.00%	1.71%
Absolute Return Fixed Income	7.00%	1.08%
<b>Total Fixed Income</b>	<b>25.00%</b>	
Private Equity	5.00%	6.25%
Private Debt	5.00%	4.75%
Opportunistic	5.00%	3.68%
<b>Total Alternative Investments</b>	<b>15.00%</b>	
<b>Real Estate</b>	<b>10.00%</b>	3.25%
<b>TOTAL</b>	<b>100.00%</b>	

\*Real rates of return are presented net of the inflation assumption, which was 2.5% for 2016.

A single discount rate of 7.25% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.25%, which is not reported net of the inflation assumption used to obtain the real weighted returns shown above. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made under the current statute RSA 100-A:16 and that plan member contributions will be made under RSA 100-A:16. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments to current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following table provides the sensitivity of the net pension liability to changes in the discount rate. In particular, the table presents the plan's net pension liability, if it were calculated using a single discount rate that is one-percentage-point lower or one-percentage-point higher than the single discount rate:

**SENSITIVITY OF THE NET PENSION LIABILITY TO THE SINGLE**

DISCOUNT RATE ASSUMPTION						(\$ in thousands)
Fiscal Year Ended	1% Decrease to 6.25%	Current Single Rate Assumption 7.25%	1% Increase to 8.25%	1% Decrease to 6.75%	Current Single Rate Assumption 7.75%	1% Increase to 8.75%
6/30/2016	\$6,832,748	\$5,317,595	\$4,061,017			
6/30/2015				\$5,214,835	\$3,961,527	\$2,893,074

The June 30, 2015 actuarial valuation rolled forward to June 30, 2016 used the following actuarial assumptions:

<b>Price Inflation</b>	2.5% per year
<b>Wage Inflation</b>	3.25% per year
<b>Salary Increases</b>	3.2% average, including inflation
<b>Investment Rate of Return</b>	7.25% per year
<b>Retirement Age</b>	Experience-based table of rates that is specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2011–2015.
<b>Mortality</b>	RP-2014 mortality tables, generationally projected with Scale MP-2015.

**NOTE 7—SIGNIFICANT CHANGES IN ACTUARIAL ASSUMPTIONS AND BENEFIT PROVISIONS OCCURRING SINCE THE JUNE 30, 2015 ACTUARIAL VALUATION**

**Changes in actuarial assumptions for fiscal year 2016:**

***Economic Assumptions:***

- The assumed investment rate of return and discount rate was reduced from 7.75% to 7.25%
- The wage inflation rate was reduced from 3.75% to 3.25%
- The price inflation assumption was reduced from 3.00% to 2.50%

***Demographic Assumptions were changed in the following categories:***

- Rates of Disability
- Rates of Retirement
- Rates of Withdrawal
- Mortality

A full experience study that details all assumption changes can be viewed at <https://www.nhrs.org/docs/default-source/actuarial/july-1-2010--june-30-2015-experience-study.pdf?sfvrsn=4>

**Legislation was enacted in the 2016 legislative session which:**

There were none.

**NOTE 8—CONTRIBUTIONS**

***PENSION PLAN***

As a condition of participation, members are required to contribute a set percentage of their salary to the Pension Plan. The percentage rates, as outlined below, are set by statute under RSA 100-A:16 and depend on the member’s group affiliation.

RSA 100-A:16 outlines the employer contributions made to the Pension Plan. Employer contributions to the Pension Plan since fiscal year 2007 have been determined on an actuarial basis using the entry age normal cost method.

The annual covered payroll for the year ended June 30, 2016 is \$2.6 million and the annual covered payroll for the fiscal year ended June 30, 2015 was \$2.58 million.

The following tables show the percentages of gross payroll contributed by the State, other contributing employers, and members to the pension plan and the OPEB plans.

**TOTAL CONTRIBUTION RATES – PENSION PLAN**

Member Category	Member Normal Share	(FY 2016)			Member Normal Share	(FY 2015)		
		State	Employer Normal Share Local	Total		State	Employer Normal Share Local	Total
Employees								
State	7.00%	10.86%	—	10.86%	7.00%	10.51%	—	10.51%
Local	7.00%	—	10.86%	10.86%	7.00%	—	10.44%	10.44%
Teachers	7.00%	—	12.72%	12.72%	7.00%	—	11.96%	11.96%
Police Officers								
State	11.55%	22.54%	—	22.54%	11.55%	21.45%	—	21.45%
Local	11.55%	—	22.54%	22.54%	11.55%	—	21.35%	21.35%
Firefighters								
State	11.80%	25.32%	—	25.32%	11.80%	23.90%	—	23.90%
Local	11.80%	—	25.32%	25.32%	11.80%	—	23.79%	23.79%

**OPEB PLAN**

In accordance with RSA 100-A:53, RSA 100-A:53-b, RSA 100-A:53-c and RSA 100-A:53-d, benefits are provided by a 401(h) subtrust of the Pension Plan.

The OPEB Plans are funded by allocating to the 401(h) subtrust the lesser of:

- a.) 25% of all employer contributions made in accordance with RSA 100-A:16; or
- b.) the percentage of employer contributions determined by the actuary to be the minimum rate necessary to maintain the benefits provided under RSA 100-A:53, RSA 100-A:53-b, RSA 100-A:53-c and RSA 100-A:53-d.

For fiscal year 2016, the minimum rates determined by the actuary to maintain benefits were the lesser of the two options and were used to determine the employer contributions due to the 401(h) subtrust.

The State Legislature has the authority to establish, amend and discontinue the contribution requirements of the OPEB Plans. Administrative costs are allocated to the OPEB Plan based on fund balances.

**TOTAL CONTRIBUTION RATES – OPEB PLANS**

Member Category	Member Normal Share	(FY 2016)			Member Normal Share	(FY 2015)		
		State	Employer Normal Share Local	Total		State	Employer Normal Share Local	Total
Employees								
State	—	1.64%	—	1.64%	—	1.62%	—	1.62%
Local	—	—	.31%	.31%	—	—	.33%	.33%
Teachers	—	—	2.95%	2.95%	—	—	2.20%	2.20%
Police Officers								
State	—	3.84%	—	3.84%	—	3.95%	—	3.95%
Local	—	—	3.84%	3.84%	—	—	3.95%	3.95%
Firefighters								
State	—	3.84%	—	3.84%	—	3.95%	—	3.95%
Local	—	—	3.84%	3.84%	—	—	3.95%	3.95%

The following tables show the amounts contributed by participating employers and members and these contributions expressed as a percentage of the respective covered payrolls.

**TOTAL AMOUNTS CONTRIBUTED — PENSION AND OPEB PLANS**

(in thousands)

Member Category	Member Normal Share**	(FY 2016) Employer Normal Share			Member Normal Share**	(FY 2015) Employer Normal Share		
		Pension Plan*	OPEB Plans*	Total Contributions		Pension Plan*	OPEB Plans*	Total Contributions
Employees	\$ 82,661	\$124,484	\$10,529	\$217,674	\$ 81,656	\$118,208	\$10,400	\$210,264
Teachers	76,681	136,335	31,791	244,807	74,770	124,137	22,557	221,464
Police Officers	34,031	65,589	11,166	110,786	33,414	61,098	11,276	105,788
Firefighters	14,576	30,926	4,688	50,190	14,223	28,704	4,682	47,609
<b>Total Contributed</b>	<b>\$207,949</b>	<b>\$357,334</b>	<b>\$58,174</b>	<b>\$623,457</b>	<b>\$204,063</b>	<b>\$332,147</b>	<b>\$48,915</b>	<b>\$585,125</b>

\*Includes contributions made by both State and local employers

\*\*Includes voluntary member contributions of \$4.6 million in FY 2016 and \$5.4 million in FY 2015.

**TOTAL AMOUNTS CONTRIBUTED EXPRESSED AS A PERCENTAGE OF COVERED PAYROLL PENSION AND OPEB PLANS**

Member Category	Member Normal Share**	(FY 2016) Employer Normal Share			Member Normal Share	(FY 2015) Employer Normal Share		
		Pension Plan*	OPEB Plans*	Total Contributions		Pension Plan*	OPEB Plans*	Total Contributions
Employees	7.27%	10.95%	0.93%	19.15%	7.24%	10.49%	0.92%	18.65%
Teachers	7.20%	12.79%	2.98%	22.97%	7.12%	11.82%	2.15%	21.09%
Police Officers	12.13%	23.38%	3.98%	39.49%	11.95%	21.86%	4.03%	37.84%
Firefighters	12.27%	26.04%	3.95%	42.26%	12.13%	24.48%	3.99%	40.60%
<b>Total Contributed</b>	<b>7.99%</b>	<b>13.74%</b>	<b>2.24%</b>	<b>23.97%</b>	<b>7.92%</b>	<b>12.90%</b>	<b>1.90%</b>	<b>22.72%</b>

As a matter of practice, actual contribution rates are determined by the previous valuation. Using the forecast rates delays implementation of the rates proposed by the actuary until the beginning of the subsequent biennium, allowing employers to budget for changes in employer rates. The employer normal contribution rates for the fiscal year 2016 was based on the June 30, 2013 actuarial valuation. Fiscal year 2015 contribution rates were based on the June 30, 2011 actuarial valuation.

**NOTE 9 — ADMINISTRATIVE EXPENSES**

Certain expenses related to the administration of the Plans are budgeted and approved by the Board of Trustees, and are subject to appropriation biennially by the State Legislature. Administrative expenses are included in the accompanying financial statements.

Administrative expenses consist primarily of salaries and benefits for 59 full-time and part-time employees and the costs associated with operating and maintaining computer systems.

**NOTE 10 — CONTINGENT MATTERS**

The System may have legal matters or claims that arise from time to time through the normal course of business. However, in the opinion of management and legal counsel, such matters are not expected to have an adverse effect on the NHRS's financial status.



## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

### SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS — PENSION PLAN

(\$ in thousands)

Fiscal Year Ended	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
<b>Total Pension Liability</b>				
Service Cost	\$ 266,379	\$ 243,965	\$ 245,828	\$ 255,178
Interest on the Total Pension Liability	875,247	847,646	815,214	789,792
Benefit Changes	—	—	—	—
Difference between expected and actual experience of the Total Pension Liability	18,404	( 106,715)	—	( 101,141)
Assumption Changes	815,023	—	—	—
Benefit Payments	( 670,360)	( 631,312)	( 599,476)	( 573,470)
Refunds	( 24,233)	( 26,345)	( 26,120)	( 23,191)
Net Changes in Total Pension Liability	1,280,460	327,239	435,446	347,168
Total Pension Liability — Beginning	11,471,453	11,144,214	10,708,768	10,361,600
<b>Total Pension Liability — Ending</b>	<b>\$12,751,913</b>	<b>\$11,471,453</b>	<b>\$11,144,214</b>	<b>\$10,708,768</b>
<b>Plan Fiduciary Net Position</b>				
Contributions — Employer	\$ 357,482	\$ 332,294	\$ 328,444	\$ 249,835
Contributions — Member	207,949	204,063	199,033	196,489
Pension Plan Net Investment Income	61,878	249,806	1,092,586	813,798
Benefit Payments	( 670,360)	( 631,312)	( 599,476)	( 573,470)
Refunds	( 24,233)	( 26,345)	( 26,120)	( 23,191)
Pension Plan Administrative Expense	( 7,061)	( 7,582)	( 7,377)	( 6,999)
Other custodial, professional and non-investment expenses	( 1,263)	( 1,626)	( 1,446)	( 1,805)
Net Change in Plan Fiduciary Net Position	( 75,608)	119,298	985,644	654,657
Plan Fiduciary Net Position — Beginning	7,509,926	7,390,628	6,404,984	5,750,327
<b>Plan Fiduciary Net Position — Ending</b>	<b>\$ 7,434,318</b>	<b>\$ 7,509,926</b>	<b>\$ 7,390,628</b>	<b>\$ 6,404,984</b>
<b>Net Pension Liability</b>	<b>\$ 5,317,595</b>	<b>\$ 3,961,527</b>	<b>\$ 3,753,586</b>	<b>\$ 4,303,784</b>
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	58.3%	65.5%	66.3%	59.8%
Covered Employee Payroll	\$ 2,601,404	\$ 2,575,031	\$ 2,507,899	\$ 2,501,742
Net Pension Liability as a Percentage of Covered Employee Payroll	204.4%	153.8%	149.7%	172.0%

Schedule is intended to show information for 10 years. Additional years will be added as they become available.

### SCHEDULE OF EMPLOYER CONTRIBUTIONS — PENSION PLAN

(\$ in thousands)

Fiscal Year Ended	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
6/30/2016	\$357,482	\$357,482	—	\$2,601,404	13.7%
6/30/2015	\$332,294	\$332,294	—	\$2,575,031	12.9%
6/30/2014	\$328,444	\$328,444	—	\$2,507,899	13.1%
6/30/2013	\$249,836	\$249,836	—	\$2,501,742	10.0%
6/30/2012	\$254,557	\$254,557	—	\$2,487,757	10.2%
6/30/2011	\$274,582	\$274,582	—	\$2,517,779	10.9%
6/30/2010	\$269,677	\$269,677	—	\$2,481,384	10.9%
6/30/2009	\$261,230	\$261,230	—	\$2,448,287	10.7%
6/30/2008	\$250,520	\$250,520	—	\$2,308,321	10.9%
6/30/2007	\$178,053	\$178,053	—	\$2,195,339	8.1%

### SCHEDULE OF INVESTMENT RETURNS

Fiscal Year Ended

Annual Money Weighted Rate of Return — Net of Investment Expenses

6/30/2016	0.9%
6/30/2015	3.4%
6/30/2014	17.6%

Schedule is intended to show information for 10 years. Additional years will be added as they become available. See accompanying notes to the required supplementary information and independent auditors report.



**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – LAST TEN FISCAL YEARS**

**CHANGES OF BENEFIT TERMS**

- Modified the calculation of Average Final Compensation (AFC) for members not vested prior to Jan. 1, 2012, by changing the “compensation over base pay” factor used in the AFC formula from a dollar average to a percentage average.
- 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 Jan. 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.
- 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 Jan. 1, 2012, must have in order to qualify for the supplemental disability benefit available to eligible Accidental Disability retirees.
- 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 Jan. 1, 2012, is the lesser of 85 percent of AFC or \$120,000 per year.
- Changes the definition of Earnable Compensation for active members who begin service on or after July 1, 2011 or who are not in vested status as of January 1, 2012.
- For active members who commenced service on or after July 1, 2011 or who have non-vested status as of January 1, 2012 Average Final Compensation (AFC) equals the average annual Earnable Compensation during the highest five years of creditable service.
- For members who commenced service on or after July 1, 2009 or are not vested as of January 1, 2012, a member’s retirement benefit shall not exceed the lesser of 85 percent of the member’s highest AFC or \$120,000.
- 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 multiplied by creditable service reduced for each month prior to the month after the member attains age 65 by ¼ of 1 percent. After age 65, the state annuity, together with the member annuity, shall be equal to 1/66th of AFC multiplied by creditable service, reduced for each month prior to the month after the member attains age 65 by 1/4 of 1 percent.
- 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 percent of AFC multiplied by 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 percent.
- 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.

<b>Years of Creditable Service as of January 1, 2012</b>	<b>Minimum Age</b>	<b>Minimum Service</b>	<b>Benefit Multiplier</b>
At least 8 but less than 10 years	46	21	2.4%
At least 6 but less than 8 years	47	22	2.3%
At least 4 but less than 6 years	48	23	2.2%
Less than 4 years	49	24	2.1%
Hired on or after July 1, 2011	52.5*	25	2.0%

\*These members are eligible for a reduced service retirement pension at age 50.

- Member Contribution changes
  - (a) Group I (Employee and Teacher) members: 7.0 percent of Earnable Compensation.
  - (b) Group II Fire members: 11.80 percent of Earnable Compensation.
  - (c) Group II Police members: 11.55 percent of Earnable Compensation.
  - (d) Group II (Police and Fire) 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 (Police and Fire) members with creditable service in excess of 42.5 years.

- Redefines Extra or Special Duty Pay (ESDP) as a component of a member's Earnable Compensation to mean member work activities or details for which the employer bills or charges another entity for the work activities provided.
- Requires that for fiscal years beginning on or after July 1, 2009, political subdivision employers must report monthly to NHRS all ESDP paid to Group II (Police and Fire) members. Employers are also required to include in their billing to the entity for whom the ESDP is provided, the full amount of employer contributions required under RSA 100-A:16, II(b), which are applicable to the ESDP paid to Group II members. If the contributions are not paid by the entity, employers are required to pay 100 percent of the employer contributions attributable to all ESDP paid to Group II members.
- Repeals RSA 457-A regarding civil unions and amends RSA 457 to allow same gender couples to marry in New Hampshire. Because NHRS must follow the federal definition of marriage when administering pension plan benefits, certain retirement benefits for same gender married couples will be limited, as is currently the case with civil union partners.
- In accordance with the federal Heroes Earnings Assistance and Relief Tax (HEART) Act of 2008, provides that Ordinary Death benefits paid to a surviving spouse in the form of an annuity will not terminate upon the remarriage of such surviving spouse. Further, the law defines "qualified military service and provides Ordinary Death benefits for beneficiaries of NHRS members who die on or after January 1, 2007 while performing qualified military service.
- Establishes that the maximum retirement benefit granted under RSA 100-A:5 or RSA 100-A:6 for members hired after June 30, 2009 shall not exceed \$120,000 annually.
- Permits a member of the New Hampshire Retirement System to purchase up to two years of service credit for the period of time in which a member served in the Peace Corps or Americorps, subject to certain specified eligibility requirements.
- Establishes that the maximum retirement benefit granted under RSA 100-A:5 or RSA 100-A:6 shall not exceed 100 percent of the member's highest year of Earnable Compensation.

### **CHANGES OF ASSUMPTIONS**

An actuarial review, commonly called an experience study, of the mortality, service, withdrawals, and compensation experience of members is required by statute at least once during each five-year period. The last actuarial review was performed during fiscal year 2016 and was based on the information available as of June 30, 2015.

There were many assumption changes adopted by the Board based on the study in 2010. Two changes of particular importance were:

- The investment rate of return assumption was reduced from 8.5% to 7.75%
- The wage inflation assumption was reduced from 4.50% to 3.75%

Assumption changes adopted as a results of the 2015 experience study are:

#### ***Economic Assumptions:***

- The assumed investment rate of return was reduced from 7.75% to 7.25%
- The wage inflation rate was reduced from 3.75% to 3.25%
- The price inflation assumption was reduced from 3.00% to 2.50%

#### ***Demographic Assumptions were changed in the following categories:***

- Rates of Disability
- Rates of Retirement
- Rates of Withdrawal
- Mortality

The full experience study results can be viewed at [www.nhrs.org/docs/default-source/actuarial/july-1-2010---june-30-2015-experience-study.pdf](http://www.nhrs.org/docs/default-source/actuarial/july-1-2010---june-30-2015-experience-study.pdf)

**SCHEDULE OF FUNDING PROGRESS – OPEB PLANS**

(\$ in thousands)

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 Percentage of Covered Payroll ([b-a]/c)
<b>Group II – Police Officers &amp; Firefighters</b>						
06/30/16	\$ 10,539	\$347,619	\$337,080	3.0%	\$ 399,331	84.4%
06/30/15	\$ 10,306	\$313,933	\$303,627	3.3%	\$ 396,818	76.5%
06/30/14	\$ 9,401	\$331,744	\$322,343	2.8%	\$ 385,524	83.6%
06/30/13	\$ 8,686	\$337,097	\$328,411	2.6%	\$ 382,563	85.8%
06/30/12	\$ 8,813	\$336,241	\$327,428	2.6%	\$ 374,321	87.5%
06/30/11	\$ 9,907	\$341,942	\$332,035	2.9%	\$ 367,536	90.3%
<b>Group I – Teachers</b>						
06/30/16	(\$ 4,605)	\$251,661	\$256,266	(1.8%)	N/A	N/A
06/30/15	(\$ 13,305)	\$229,404	\$242,709	(5.8%)	N/A	N/A
06/30/14	(\$ 11,248)	\$238,681	\$249,929	(4.7%)	N/A	N/A
06/30/13	(\$ 10,314)	\$245,465	\$255,779	(4.2%)	N/A	N/A
06/30/12	(\$ 9,097)	\$254,850	\$263,947	(3.6%)	N/A	N/A
06/30/11	(\$ 6,131)	\$262,107	\$268,238	(2.3%)	N/A	N/A
<b>Group I – Political Subdivision Employees</b>						
06/30/16	\$ 19,968	\$ 57,462	\$ 37,494	34.7%	N/A	N/A
06/30/15	\$ 21,961	\$ 58,609	\$ 36,648	37.5%	N/A	N/A
06/30/14	\$ 22,767	\$ 65,506	\$ 42,739	34.8%	N/A	N/A
06/30/13	\$ 23,356	\$ 67,667	\$ 44,311	34.5%	N/A	N/A
06/30/12	\$ 25,519	\$ 73,254	\$ 47,735	34.8%	N/A	N/A
06/30/11	\$ 28,917	\$ 77,650	\$ 48,733	37.2%	N/A	N/A
<b>Group I – State Employees</b>						
06/30/16	\$ 1,448	\$ 73,389	\$ 71,941	2.0%	N/A	N/A
06/30/15	\$ 553	\$ 73,716	\$ 73,163	0.7%	N/A	N/A
06/30/14	\$ 325	\$ 78,172	\$ 77,847	0.4%	N/A	N/A
06/30/13	\$ 95	\$ 81,643	\$ 81,548	0.1%	N/A	N/A
06/30/12	(\$ 917)	\$ 88,414	\$ 89,331	(1.0%)	N/A	N/A
06/30/11	\$ 527	\$ 95,873	\$ 95,346	0.5%	N/A	N/A

The schedule of funding progress presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS – OPEB PLANS**

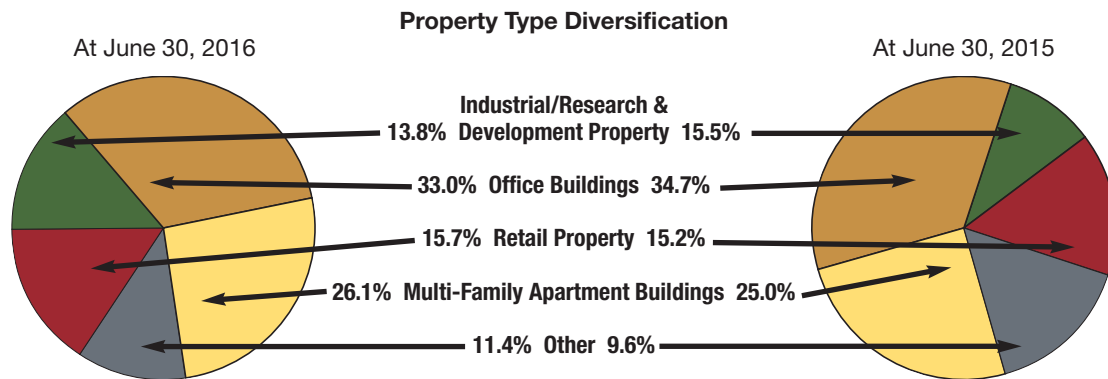
Fiscal Year	Classification	Annual Contribution (ARC) (in thousands)	Percent of ARC Recognized as Contributions
2016	Group II Police Officers & Firefighters	15,854	100.00%
	Group I Teachers	31,791	100.00%
	Group I Political Subdivision Employees	1,938	100.00%
	Group I State Employees	8,591	100.00%
2015	Group II Police Officers & Firefighters	15,958	100.00%
	Group I Teachers	22,557	100.00%
	Group I Political Subdivision Employees	8,552	100.00%
	Group I State Employees	1,848	100.00%
2014	Group II Police Officers & Firefighters	15,438	100.00%
	Group I Teachers	23,277	100.00%
	Group I Political Subdivision Employees	2,010	100.00%
	Group I State Employees	8,156	100.00%
2013	Group II Police Officers & Firefighters	15,260	100.00%
	Group I Teachers	23,767	100.00%
	Group I Political Subdivision Employees	1,885	100.00%
	Group I State Employees	8,800	100.00%
2012	Group II Police Officers & Firefighters	14,683	100.00%
	Group I Teachers	24,021	100.00%
	Group I Political Subdivision Employees	1,928	100.00%
	Group I State Employees	8,332	100.00%
2011	Group II Police Officers & Firefighters	8,355	100.00%
	Group I Teachers	13,790	100.00%
	Group I Political Subdivision Employees	423	100.00%
	Group I State Employees	10,333	100.00%

**SUPPORTING SCHEDULES**

**REAL ESTATE INVESTMENTS BY TYPE**

(in thousands)

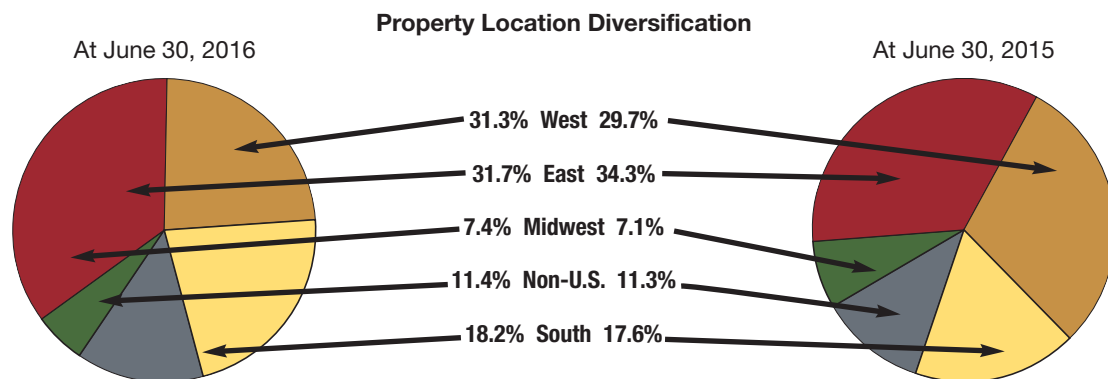
	<b>JUNE 30</b>	
	<b>2016</b>	<b>2015</b>
Office Buildings	\$259,758	\$234,939
Multi-Family Apartment Buildings	205,361	168,922
Retail Property	124,050	102,861
Industrial/Research & Development Property	109,068	105,114
Other	89,700	64,767
<b>TOTAL REAL ESTATE INVESTMENTS BY TYPE</b>	<b>\$787,937</b>	<b>\$676,603</b>



**REAL ESTATE INVESTMENTS BY LOCATION**

(in thousands)

	<b>JUNE 30</b>	
	<b>2016</b>	<b>2015</b>
West	\$246,382	\$200,851
East	249,682	232,105
South	143,648	119,698
Midwest	58,047	47,742
Non-U.S.	90,178	76,207
<b>TOTAL REAL ESTATE INVESTMENTS BY LOCATION</b>	<b>\$787,937</b>	<b>\$676,603</b>



**ALTERNATIVE INVESTMENTS**

(in thousands)

	<b>JUNE 30</b>	
	<b>2016</b>	<b>2015</b>
Venture Capital	\$ 542	\$ 542
Growth Equity	107,074	78,437
Buyouts	123,305	67,626
Secondaries	125,098	108,556
Mezzanine	12,732	12,263
Distressed	162,585	114,812
Absolute Return Strategies	1,808	2,918
Opportunistic	206,410	214,839
Direct Lending Strategies	211,134	125,994
Energy	34,285	3,156
<b>TOTAL ALTERNATIVE INVESTMENTS</b>	<b>\$984,973</b>	<b>\$729,143</b>

**NET APPRECIATION (DEPRECIATION)  
IN FAIR VALUE OF INVESTMENTS**

(in thousands)

	<b>YEAR ENDED JUNE 30</b>	
	<b>2016</b>	<b>2015</b>
<b>Equity Investments:</b>		
Domestic	(\$ 59,465)	\$ 145,337
Non-U.S.	( 127,878)	( 57,045)
Fixed Income Investments	23,877	( 60,946)
Real Estate	86,240	72,058
Venture Capital	—	—
Growth Equity	2,244	( 9,199)
Buyouts	7,014	7,823
Secondaries	4,631	13,574
Mezzanine	35	813
Distressed	( 2,188)	1,180
Absolute Return Strategies	( 220)	( 156)
Opportunistic	( 8,969)	8,347
Direct Lending	1,140	2,477
Energy	460	( 746)
<b>TOTAL NET APPRECIATION (DEPRECIATION) IN FAIR VALUE OF INVESTMENTS</b>	<b>(\$ 73,079)</b>	<b>\$ 123,517</b>

**REAL ESTATE INVESTMENTS INCOME AND EXPENSES**

(in thousands)

	<b>INCOME</b>		<b>EXPENSE</b>		<b>NET INCOME</b>	
	<b>YEAR ENDED JUNE 30</b>		<b>YEAR ENDED JUNE 30</b>		<b>YEAR ENDED JUNE 30</b>	
	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>
Office Buildings	\$ 3,240	\$ 2,702	\$ —	\$ —	\$ 3,240	\$ 2,702
Multi-Family Apartment Buildings	2,722	1,853	—	1	2,722	1,852
Retail Property	416	1,145	3	3	413	1,142
Industrial/Research & Development Property	645	1,599	—	1	645	1,598
Hotels	—	1,190	57	—	( 57)	1,190
Other	1,398	1,922	—	—	1,398	1,922
<b>TOTAL</b>	<b>8,421</b>	<b>\$10,411</b>	<b>\$ 60</b>	<b>\$ 5</b>	<b>\$ 8,361</b>	<b>\$10,406</b>

**INVESTMENT ACTIVITY FEES AND OTHER INVESTMENT RELATED EXPENSES**

(in thousands)

	<b>YEAR ENDED JUNE 30</b>	
	<b>2016</b>	<b>2015</b>
<b>INVESTMENT ACTIVITY FEES:</b>		
Equity Investments:		
Domestic	\$ 8,174	\$ 8,802
Non-U.S.	8,022	8,386
Fixed Income Investments	3,990	3,802
Real Estate	1,821	1,830
Custodial Fees	624	675
Investment Advisor Fees	735	730
Investment Staff Administrative Expense	610	581
<b>TOTAL INVESTMENT ACTIVITY FEES</b>	<b>\$23,976</b>	<b>\$ 24,806</b>

INTEREST INCOME	(in thousands)	
	YEAR ENDED JUNE 30	
	2016	2015
Fixed Income Investments	\$ 53,017	\$ 51,887
Cash and Cash Equivalents	962	241
<b>TOTAL INTEREST INCOME</b>	<b>\$ 53,979</b>	<b>\$ 52,128</b>

DIVIDEND INCOME	(in thousands)	
	YEAR ENDED JUNE 30	
	2016	2015
Equity Investments:		
Domestic	\$ 51,216	\$ 56,459
Non-U.S.	22,949	23,436
<b>TOTAL DIVIDEND INCOME</b>	<b>\$ 74,165</b>	<b>\$ 79,895</b>

ALTERNATIVE INVESTMENT INCOME (LOSS)	(in thousands)	
	YEAR ENDED JUNE 30	
	2016	2015
Distressed	\$ 3,574	\$ 1,467
Secondaries	487	626
Direct Lending	16,546	6,477
Opportunistic	539	611
Energy	( 51)	( 16)
Mezzanine	832	478
Buyouts	380	57
Growth Equity	269	85
<b>TOTAL ALTERNATIVE INVESTMENT INCOME*</b>	<b>\$ 22,576</b>	<b>9,785</b>

\*Other alternative investment types not listed above had no income (loss) for either of the years reported. For a complete list of alternative investment types see page 55.



CONTRIBUTIONS	(in thousands)	
	YEAR ENDED JUNE 30	
	2016	2015
<b>CONTRIBUTIONS—PENSION PLAN</b>		
EMPLOYER CONTRIBUTIONS:		
Employees	\$ 124,600	\$ 118,280
Teachers	136,367	124,206
Police Officers	65,591	61,099
Firefighters	30,924	28,709
<b>TOTAL EMPLOYER CONTRIBUTIONS</b>	<b>\$ 357,482</b>	<b>\$ 332,294</b>
PLAN MEMBER CONTRIBUTIONS:		
Employees	\$ 82,661	81,656
Teachers	76,681	74,770
Police Officers	34,031	33,414
Firefighters	14,576	14,223
<b>TOTAL PLAN MEMBER CONTRIBUTIONS</b>	<b>\$ 207,949</b>	<b>\$ 204,063</b>
<b>TOTAL CONTRIBUTIONS—PENSION PLAN</b>	<b>\$ 565,431</b>	<b>\$ 536,357</b>
<b>CONTRIBUTIONS — OPEB PLANS</b>		
EMPLOYER NORMAL:		
Group II — Police Officers and Firefighters	\$ 15,854	15,958
Group I — Teachers	31,791	22,557
Group I — Political Subdivision Employees	1,938	1,848
Group I — State Employees	8,591	8,552
<b>TOTAL CONTRIBUTIONS — OPEB PLANS</b>	<b>\$ 58,174</b>	<b>\$ 48,915</b>
<b>TOTAL CONTRIBUTIONS</b>	<b>\$ 623,605</b>	<b>\$ 585,272</b>

BENEFITS	(in thousands)	
	YEAR ENDED JUNE 30	
	2016	2015
PENSION BENEFITS AND ADDITIONAL ALLOWANCES:		
Employees	\$ 218,678	\$ 207,011
Teachers	266,566	252,205
Police Officers	125,567	116,742
Firefighters	59,549	55,354
<b>TOTAL PENSION BENEFITS AND ADDITIONAL ALLOWANCES</b>	<b>\$ 670,360</b>	<b>\$ 631,312</b>
POSTEMPLOYMENT MEDICAL BENEFITS:		
Group II Police and Fire	\$ 16,528	16,374
Group I Teachers	21,772	22,762
Group I Political Subdivision Employees	5,681	5,792
Group I State Employees	7,824	8,369
<b>TOTAL POSTEMPLOYMENT MEDICAL BENEFITS</b>	<b>\$ 51,805</b>	<b>\$ 53,297</b>
<b>TOTAL BENEFITS</b>	<b>\$ 722,165</b>	<b>\$ 684,609</b>

REFUNDS OF CONTRIBUTIONS	(in thousands)	
	YEAR ENDED JUNE 30	
	2016	2015
Employees	\$ 14,346	\$ 14,388
Teachers	6,421	7,073
Police Officers	3,032	4,294
Firefighters	434	590
<b>TOTAL REFUNDS OF CONTRIBUTIONS</b>	<b>\$ 24,233</b>	<b>\$ 26,345</b>

**ADMINISTRATIVE EXPENSE FOR THE YEARS ENDED  
JUNE 30, 2016 AND 2015**

(in thousands)

	2016 EXPENSE	UNAUDITED 2016 BUDGET*	UNAUDITED OVER (UNDER) BUDGET	2015 EXPENSE	UNAUDITED 2015 BUDGET*	UNAUDITED OVER (UNDER) BUDGET
Salaries and Wages	\$ 3,587	\$ 3,536	\$ 51	\$ 3,452	\$ 4,096	(\$ 644)
Fringe Benefits	1,829	1,874	( 45)	1,818	2,493	( 675)
Supplies, Utilities and Postage	210	206	4	298	439	( 141)
Organizational Dues	11	11	—	12	12	—
Equipment	3	5	( 2)	12	27	( 15)
Travel — Staff	22	23	( 1)	12	23	( 11)
Board Expenses	17	17	—	16	28	( 12)
Employee Training	18	18	—	—	—	—
State Services	30	30	—	32	62	( 30)
Office Rents and Expenses	512	510	2	483	533	( 50)
Computer Support and System Development	698	831	( 133)	1,344	2,034	( 690)
Consulting	126	93	33	123	110	13
Workers Compensation	( 2)	( 2)	—	5	5	—
Unemployment Compensation	18	15	3	9	9	—
<b>TOTAL</b>	<b>\$ 7,078</b>	<b>\$ 7,167</b>	<b>(\$ 89)</b>	<b>\$ 7,616</b>	<b>\$ 9,871</b>	<b>(\$2,255)</b>

\*The New Hampshire biennial budget is composed of the initial operating budget and supplemented by additional appropriations. These appropriations are generated by Governor and Council action, annual session laws, and existing statutes which require appropriations under certain circumstances. The budget therefore is a flexible budget. It is a biennial budget which consists of balances brought forward plus current year appropriations, less balances carried forward into the following fiscal year. The balances carried forward into the following fiscal year are composed of encumbrances and non-lapsing appropriations.

**PROFESSIONAL FEES**

(in thousands)

	YEAR ENDED JUNE 30	
	2016	2015
Legal Fees	\$ 554	\$ 867
Actuarial Fees	176	249
Audit Fees	222	207
<b>TOTAL PROFESSIONAL FEES</b>	<b>\$ 952</b>	<b>\$ 1,323</b>

**MEMBERSHIP COMPOSITION**

	<b>JUNE 30</b>	
	<b>2016</b>	<b>2015</b>
<b>ACTIVE CONTRIBUTING MEMBERS:</b>		
Employees	24,520	24,298
Teachers	17,784	17,732
Police Officers	4,139	4,174
Firefighters	1,626	1,608
<b>TOTAL ACTIVE CONTRIBUTING MEMBERS*</b>	<b>48,069</b>	<b>47,812</b>
*Excludes inactives		
<b>RETIRED MEMBERS:</b>		
Employees	16,142	15,483
Teachers	11,410	10,859
Police Officers	3,629	3,457
Firefighters	1,595	1,551
<b>TOTAL RETIRED MEMBERS</b>	<b>32,776</b>	<b>31,350</b>
<b>TERMINATED MEMBERS ENTITLED TO BUT NOT YET RECEIVING BENEFITS:</b>		
Employees	973	1,065
Teachers	711	822
Police Officers	89	98
Firefighters	12	14
<b>TOTAL TERMINATED MEMBERS ENTITLED TO BUT NOT YET RECEIVING BENEFITS:</b>	<b>1,785</b>	<b>1,999</b>
<b>INACTIVE MEMBERS:</b>		
Non-Vested Inactive Members	9,528	8,690
<b>TOTAL TERMINATED AND INACTIVE MEMBERS</b>	<b>11,313</b>	<b>10,689</b>

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NEW HAMPSHIRE RETIREMENT SYSTEM

# INVESTMENT SECTION

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[CLICK HERE TO RETURN TO TABLE OF CONTENTS](#)

## INVESTMENT CONSULTANT'S LETTER



NEPC, LLC

KEVIN M. LEONARD  
SENIOR CONSULTANT

October 31, 2016

Board of Trustees  
Investment Committee  
Executive Director  
**The New Hampshire Retirement System**  
54 Regional Drive  
Concord, NH 03301-8507

Dear NHRS Fiduciaries:

NEPC, LLC (NEPC) is pleased to introduce this overview of the New Hampshire Retirement System (NHRS) investment program for the fiscal year ended June 30, 2016.

The overall objective of NHRS is to provide service, disability, death and vested retirement benefits, and other post-employment benefits to members and their beneficiaries. To ensure a solid foundation for the future of the System, NHRS plans and implements an investment program designed to achieve the maximum rate of return over the long term, while prudently managing the risk of the portfolio. Additionally, the NHRS investment program is administered in accordance with sound governance practices and applicable statutes. The Board of Trustees (Trustees) established an Investment Policy which includes asset allocation targets and acceptable ranges as well as asset class benchmarks for performance measurement. The Trustees retain the services of actuaries and consultants to provide guidance regarding actuarial matters, asset allocation, and investment policy. The Independent Investment Committee (Committee) manages the investment program pursuant to the investment policy, develops asset class guidelines, monitors and evaluates performance, and makes determinations regarding the retention of managers. Professional investment managers are selected by the Committee to manage portfolios in accordance with investment management agreements. The investment manual includes all investment policies and asset class guidelines and may be obtained from the NHRS website at [www.nhrs.org](http://www.nhrs.org). The following pages report on the performance and attributes of the investment program for fiscal year 2016.

Domestic markets provided mixed returns in fiscal year 2016 as sporadic episodes of heightened market volatility interrupted an otherwise positive market environment. U.S. equities were supported by the continued resilience of the U.S. economy amidst global uncertainty and geo-political events. The broad domestic equity market, as measured by the S&P 500 Index, ended the fiscal year with a +4.0% return. Domestic bond markets proved attractive during these periods of disruption providing a desired safe haven for investors and delivering strong returns. The domestic bond market, as measured by the Barclays Aggregate Bond Index, returned +6.0% over the fiscal year. International markets told a much different story as non-U.S. developed equities edged lower as U.S. dollar strength cut into returns and political turmoil led by Brexit sent a wave of volatility through the market. Emerging markets, in particular, felt the brunt of the market turmoil. Emerging market equities continued to face headwinds as growth concerns in China rose and oil prices dropped in the first half of the fiscal year. The global equity market, as measured by the MSCI All Country World Index, returned -3.7%, reflecting a blend of the positive results in the U.S. and the negative performance in the non-U.S. developed (MSCI EAFE Index -10.2%) and emerging markets (MSCI Emerging Markets Index -12.1%).

For the fiscal year ended June 30, 2016, the NHRS Total Fund returned +1.0% on a net-of-fees basis, underperforming the Total Fund custom benchmark return of +2.4% and ranking in the 35th percentile (1% being the highest, 100% being the lowest) relative to other investors in the InvestorForce Public Defined Benefit Net Universe (universe). During the following periods the NHRS Total Fund provided strong annualized net-of-fees returns relative to the universe: For the trailing three years ending June 30, 2016, the NHRS Total Fund return of +7.1% ranked in the 14th percentile of the universe; For the trailing five years ending June 30, 2016 the NHRS Total Fund return of +7.2% ranked in the 10th percentile of the universe; For the trailing ten year period ending June 30, 2016, the NHRS Total Fund returned +6.0% and ranked in the 19th

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percentile of the universe; For the trailing twenty-five year period ending June 30, 2016, the NHRS Total Fund returned +8.2%, exceeding the current assumed rate of return of 7.25%, and ranking in the 13th percentile of the universe.

During fiscal year 2016, the Committee continued to implement the expansion of the alternative investment portfolio.

NEPC provides NHRS with quarterly economic and investment market updates and performance reviews, investment manager monitoring and selection advice, and related investment services for traditional and non-traditional asset classes. Investment performance analysis and comparisons produced by NEPC have been calculated using standard performance evaluation methodologies and are consistent with industry standards. Performance results are calculated using a time-weighted return methodology and are reported on a net-of-fees basis.

Sincerely,

A handwritten signature in black ink, appearing to be 'L. M. L.', is written over a light blue horizontal line.



**INVESTMENT  
REPORTS**

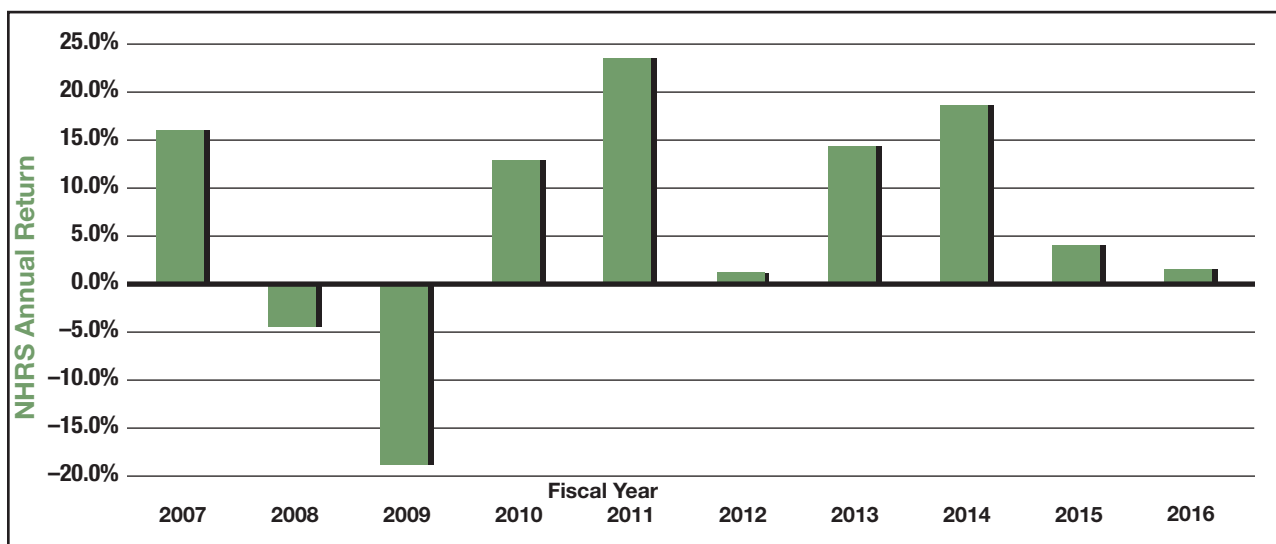
**ANNUALIZED INVESTMENT RETURNS—ACTUAL VERSUS INDICES**

	<b>Current Year 2016</b>	<b>3 Year</b>	<b>Annualized 5 Year</b>	<b>10 Year</b>
Total NHRS Fund	1.0%	7.1%	7.2%	6.0%
Total Fund Custom Index*	2.4	8.1	7.9	6.3
Domestic Equity	0.0	10.0	10.9	6.4
Total Domestic Equity Blended Benchmark*	4.0	11.8	12.0	7.6
Non-U.S. Equity	-7.9	1.1	0.5	2.5
Total Non-U.S. Equity Blended Benchmark*	-10.2	1.2	0.1	1.9
Fixed Income	4.2	3.5	4.1	6.1
Total Fixed Income Blended Benchmark*	5.8	4.2	4.0	5.3
Real Estate	13.8	14.7	13.4	6.8
Total Real Estate Blended Benchmark*	10.8	12.0	12.0	7.8
Alternative Investments	2.8	6.7	6.0	1.4
Total Alternative Investments Blended Benchmark*	4.5	15.5	15.4	11.3
Cash Equivalents	0.2	0.1	0.1	1.1
90 Day T-Bills	0.2	0.1	0.1	0.9

Performance returns are calculated on a net-of-fees time-weighted rate of return basis.

\*In a dynamic market, strategies and objectives evolve over time. Consequently, these benchmarks are blended due to historical investment strategy decisions. Detailed descriptions of the benchmarks above are available by contacting NHRS.

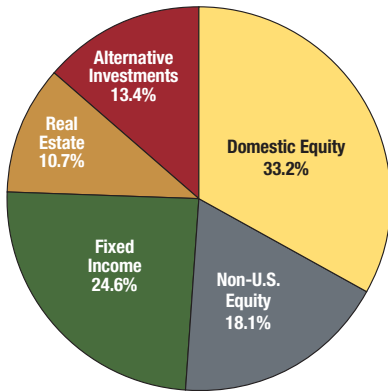
**Ten Year History of Time-Weighted Total NHRS Fund Annual Returns**



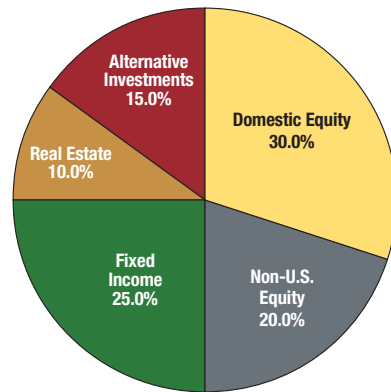
**ACTUAL ASSET ALLOCATION VERSUS TARGET ASSET ALLOCATION**

	Actual %	As of June 30, 2016	
		Target %	Target Range %
Domestic Equity	33.2%	30.0%	20 – 50
Non-U.S. Equity	18.1	20.0	15 – 25
Fixed Income	24.6	25.0	20 – 30
Real Estate	10.7	10.0	5 – 20
Alternative Investments	13.4	15.0	5 – 25
<b>TOTAL FUND</b>	<b>100.0%</b>	<b>100.0%</b>	

**Actual Asset Allocation as of June 30, 2016**



**Target Asset Allocation as of June 30, 2016**



**TEN LARGEST STOCK HOLDINGS BY FAIR VALUE\*** (in thousands)

	Shares	Stock	June 30, 2016 Fair Value
1	385,671	Apple Inc	\$36,870
2	272,595	Johnson & Johnson	33,066
3	298,943	Exxon Mobil Corp	28,023
4	540,783	Microsoft Corp	27,672
5	539,643	Oracle Corp	22,088
6	486,954	AT&T Inc	21,041
7	239,513	Medtronic PLC	20,783
8	433,454	Wells Fargo & Co	20,515
9	620,179	Intel Corp	20,342
10	636,795	General Electric Co	20,046

**TEN LARGEST FIXED INCOME HOLDINGS BY FAIR VALUE\*** (in thousands)

	Par	Security	June 30, 2016 Fair Value
1	46,511,000	U.S. Treasury Note — 1.250%, 2021	\$47,052
2	25,767,000	U.S. Treasury Bond — 2.500%, 2045	26,827
3	21,741,000	U.S. Treasury Note — 1.625%, 2020	22,358
4	305,000,000	Mexican Bonos — 7.750%, 2042	19,229
5	13,051,000	U.S. Treasury Bond — 4.500%, 2036	18,799
6	18,632,000	U.S. Treasury Note — 0.750%, 2019	18,668
7	15,536,000	U.S. Treasury Bond — 3.000%, 2045	17,857
8	17,500,000	U.S. Treasury Note — 0.750%, 2018	17,551
9	17,500,000	U.S. Treasury Note — 0.750%, 2017	17,542
10	12,570,000	United Kingdom Gilt Regs — 1.250%, 2018	17,171

\*A complete listing of separate account portfolio holdings is available by contacting the NHRS offices. NHRS also invests in various commingled investment vehicles, which are custodied outside of The Bank of NY Mellon (Master Custodian for NHRS), as reported on the Summary of Investments schedule.

\*\*Par value is denoted in local currency.

**SCHEDULE OF INVESTMENT MANAGEMENT AND SERVICE FEES**

	YEAR ENDED JUNE 30, 2016		
	Assets Under Management (in thousands)	Fees (in thousands)	Average Basis Points
<b>INVESTMENT MANAGEMENT FEES</b>			
Equity Portfolios:			
Domestic	\$ 2,422,530	\$ 8,174	34
Non-U.S.	1,327,555	8,022	60
Fixed Income Portfolios	1,798,307	3,990	22
Alternative Investments*	984,973	—	—
Real Estate	787,937	1,821	23
Cash and Cash Equivalents**	51,388	—	—
<b>TOTAL INVESTMENT MANAGEMENT FEES</b>	<b>\$ 7,372,690</b>	<b>\$ 22,007</b>	<b>30</b>
<b>INVESTMENT SERVICE FEES</b>			
Custodial Fees	\$ 7,372,690	\$ 624	1
Investment Advisor Fees — External	7,372,690	735	1
Investment Administrative Expenses — Internal	7,372,690	610	1
<b>TOTAL INVESTMENT MANAGEMENT AND SERVICE FEES</b>	<b>\$ 7,372,690</b>	<b>\$ 23,976</b>	<b>33</b>

\*The custodian records all transactions on a net of fee basis.

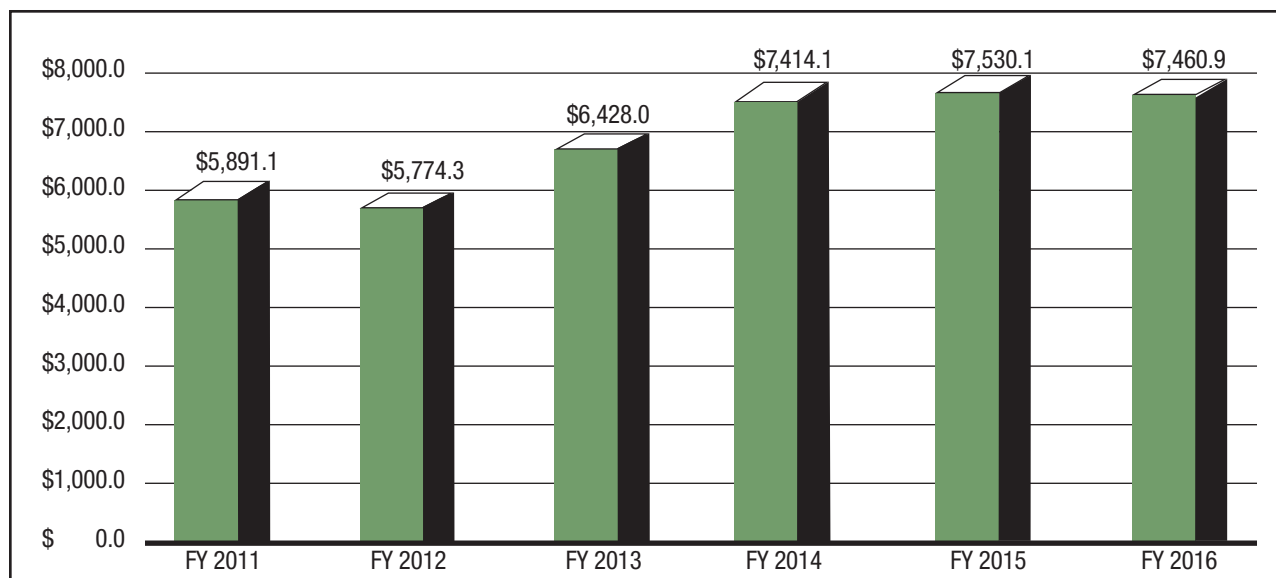
\*\*Does not include cash and cash equivalents held in manager portfolios, only in designated cash portfolios.

**SCHEDULE OF BROKERAGE COMMISSIONS PAID**

Brokerage Firm	YEAR ENDED JUNE 30, 2016		
	Number of Shares Traded (in thousands)	Total Commissions (in thousands)	Commissions Per Share
Merrill Lynch & Company Inc.	7,280	\$ 118	0.02
Goldman Sachs & Company	5,927	105	0.02
Morgan Stanley & Company Inc.	4,854	95	0.02
Credit Suisse	5,259	94	0.02
J.P. Morgan	4,089	85	0.02
UBS Securities/Warburg	4,123	81	0.02
Citigroup Global Markets Inc.	3,584	56	0.02
Jefferies & Company, Inc.	1,853	55	0.03
Instinet, Inc.	4,217	55	0.01
Barclay's Capital Inc.	1,623	49	0.03
Deutsche Bank	2,370	48	0.02
Liquidnet, Inc.	2,651	45	0.02
Investment Tech Group	2,244	40	0.02
Bernstein Sanford C & Co, New York	2,329	40	0.02
RBC Capital Markets, LLC	1,385	38	0.03
Raymond James & Assoc., Inc.	1,312	35	0.03
Pershing LLC	1,200	33	0.03
BTIG LLC	891	28	0.03
Citation Group/BCC CLRG	972	28	0.03
All Others (146 not listed separately)	32,250	662	0.02
<b>TOTAL BROKERAGE COMMISSIONS PAID</b>	<b>90,413</b>	<b>\$ 1,790</b>	<b>0.02</b>

Commission detail is not included in the schedule above for the commingled funds in which NHRS invests.

**Net Position Held In Trust For Benefits  
(in millions)**



**SUMMARY OF INVESTMENTS**

TYPE OF INVESTMENT	June 30, 2016	
	Fair Value (in millions)	Percent of Total Fair Value
<b>FIXED INCOME</b>		
Collateralized/Asset Backed Securities	\$ 172.0	2.3%
Corporate Bonds	623.0	8.5%
Government and Agency Bonds	553.8	7.5%
Doubleline Capital Floating Rate Fund	4.9	0.1%
Doubleline Capital Global Fund	1.0	0.0%
GAM	205.0	2.8%
Manulife	205.7	2.8%
<b>TOTAL FIXED INCOME</b>	<b>\$1,765.4</b>	<b>23.9%</b>
<b>EQUITY</b>		
Consumer Discretionary	479.0	6.5%
Consumer Staples	216.1	2.9%
Energy	176.0	2.4%
Financial Services	616.4	8.4%
Health Care	467.4	6.3%
Producer Durables	362.2	4.9%
Information Technology	486.3	6.6%
Materials	145.2	2.0%
Utilities	194.1	2.6%
Aberdeen Emerging Markets Smaller Companies Fund	82.0	1.1%
Neuberger Berman Emerging Markets Equity Fund	96.7	1.3%
GMO Foreign Small Companies Fund	114.2	1.5%
Wellington Emerging Markets Local Equity Fund	90.1	1.2%
LSV International Value Fund	167.9	2.3%
<b>TOTAL EQUITY</b>	<b>\$3,693.6</b>	<b>50.1%</b>
<b>OTHER INVESTMENTS</b>		
Alternative Investments	985.0	13.4%
Real Estate	787.9	10.7%
Cash and Cash Equivalents	140.8	1.9%
<b>TOTAL INVESTMENTS</b>	<b>\$7,372.7</b>	<b>100.0%</b>

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NEW HAMPSHIRE RETIREMENT SYSTEM

# ACTUARIAL SECTION

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[CLICK HERE TO RETURN TO TABLE OF CONTENTS](#)

## ACTUARIAL CERTIFICATION



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October 28, 2016

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

Attention: Mr. George Lagos

Dear Board of Trustees:

The actuarial valuation 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 below.

The purposes of this report are:

- To provide information in connection with Governmental Accounting Standards Board (GASB) Statement No. 67 “Financial Reporting for Pension Plans” as of June 30, 2016.
- To provide supporting schedules for the Comprehensive Annual Financial Report for the System’s use in the Actuarial Section, the Statistical Section, Notes to the Financial Statements, and Required Supplementary Information.

The report was based upon information, furnished by New Hampshire Retirement System (NHRS) staff, concerning Retirement System benefits, financial transactions, and active members, terminated members, retirees and beneficiaries as of June 30, 2016. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the data provided by NHRS. GRS is not responsible for unauthorized use of this report.

We prepared the following supporting schedules for the Comprehensive Annual Financial Report for the System’s use in the Actuarial Section, the Statistical Section, Notes to the Financial Statements and Required Supplementary Information:

- Summary of Actuarial Assumptions and Methods
  - Percent Retiring Within Next Year
  - Probabilities of Becoming Disabled Within Next Year
  - Percent Separating Within Next Year
  - Individual Employee Pay Increases
- Retirees and Beneficiaries Age Distribution
- Active Members by Valuation Division
- Active Members Age and Service Distribution
- Historical Membership Data – Active and Retired
- Summary of Membership Data by Category
- Schedule of Average Benefit Payment Amounts
- Schedule of Retired and Vested Members by Type of Benefit
- Schedule of Funding Progress – Other Post-Employment Benefits (OPEB)
- Solvency Test
- Schedule of Employer Contributions – Pension and OPEB
- Schedule of Changes in the Employers’ Net Pension Liability and Related Ratios – Pension Plan
- Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

Information in historical schedules prior to June 30, 2007 was provided by the previous actuary.

The schedules include information regarding plan funding under the New Hampshire Statute RSA 100-A:16. The basic financial objective of the New Hampshire Retirement System (NHRS) is to establish and receive pension contributions which:

- when expressed in terms of percents of active member payroll will remain approximately level from generation to generation; and

- when combined with present assets and future investment return will be sufficient to meet the financial obligations of NHRS to present and future retirees and beneficiaries.

The financial objective for medical subsidy benefits under RSA 100-A:53, 53-a, 53-b and 53-c is to contribute the lesser of 25 percent of the total employer contribution or the minimum amount necessary to maintain the benefit. RSA 100-A:16 requires biennial actuarial valuation on June 30 of odd years. The Board has adopted an Actuarial Funding Policy which requires annual actuarial valuations. The financial objectives are addressed within the statutory biennial actuarial valuation. The valuation process develops pension contribution rates that are sufficient to fund the plan's current pension cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund pension unfunded actuarial accrued liabilities as a level percent of active member payroll over a closed 30-year period beginning with the fiscal year ending June 30, 2010.

The actuarial calculations for funding purposes as of June 30, 2016 in this report are based on the assumptions adopted by the Board pursuant to the June 30, 2015 experience study and the census information as of June 30, 2016. The actuarial accrued liability as of June 30, 2016 differs from the total pension liability as of June 30, 2016 under GASB No. 67 because the total pension liability is based on a roll-forward of the June 30, 2015 actuarial valuation under the System's accounting procedures.

For funding purposes, assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed five-year period. For GASB No. 67 purposes, assets are reported and used on a market basis.

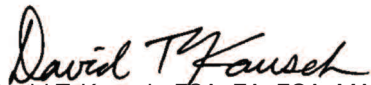
The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The actuarial assumptions are established by the Board after consulting with the actuary under New Hampshire Statute RSA 100-A:14 IX. We believe that the assumptions and methods 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. The actuarial funding method is the Individual Entry Age Actuarial Cost Method, in compliance with NHRS State Statutes. The assumptions and the methods comply with the requirements of Statements No. 67 and No. 43 of the Governmental Accounting Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. Actuarial methods and assumptions were adopted by the Board pursuant to the June 30, 2015 Experience Study.

We certify that the information contained in this June 30, 2016 accounting report of the NHRS is accurate and fairly presents the actuarial position of the New Hampshire Retirement System as of June 30, 2015 under the current actuarial assumptions. 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 RSA 100-A:16, 100-A:53, 100-A:53-b, 100-A:53-c, 100-A:53-d and 100-A:53-e.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or 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.

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

Respectfully submitted,



David T. Kausch, PSA, EA, FCA, MAAA



Judith A. Kermans, EA, FCA, MAAA



Heidi G. Barry, ASA, MAAA



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

The actuarial methods and assumptions that were used in the development of the June 30, 2016 interim actuarial valuation are as follows. The June 30, 2016 interim valuation is not used to determine employer contribution.

### VALUATION METHODS

#### PENSION

**Actuarial Cost Methods** — 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 are amortized by level (principal and interest combined) percent-of-payroll contributions over 22 years from the contribution effective date of July 1, 2017 (FY 2018).

#### OPEB

- (i) Liabilities are determined under the entry-age actuarial cost method.
- (ii) Contribution rates to the 401(h) sub-trust are determined as the lesser of 25% of the employers' contributions or the actuarial required contribution rate that keeps the medical subsidy sub-trust solvent (the "solvency rate").

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

The actuarial value of assets 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 rate determined by the June 30, 2015 interim valuation is illustrative for the 2018–19 biennium. The unfunded actuarial accrued liability (UAAL) was determined using the funding value of assets and actuarial accrued liability calculated as of the valuation date. The UAAL amortization payment (one component of the contribution requirement), is the level percent of pay required to fully amortize the UAAL over a 22 year period beginning on July 1, 2017. 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 determined by the June 30, 2013 valuation effective from July 1, 2015 to June 30, 2017 would be contributed to the net pension position.

### ECONOMIC ASSUMPTIONS

The investment return rate assumed in the valuation is 7.25% per year, compounded annually (net after investment expenses). The investment return rate assumed in the medical subsidy valuations is 3.25% 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 7.25% on the market value of assets.

The wage inflation rate assumed in this valuation was 3.25% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macro economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

No specific price inflation assumption is required to perform this valuation, since there are no benefits that are linked to price increases. However, a price inflation assumption on the order of 3.0% 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 — on the order of 4.75%, considering both an inflation assumption and an average expense provision.

The active member population is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at the wage inflation rate — 3.75% per year.

Pay increase assumptions for individual active members are shown for sample ages on pages 76–81. 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 macro economic forces.

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## TECHNICAL ASSUMPTIONS

<b>Administrative &amp; Investment Expenses</b>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the prior year's administrative expenses. Assumed administrative expenses are added to the Normal Cost, and were 0.35% of payroll in the June 30, 2016 interim valuation.
<b>Benefit Service</b>	Exact fractional service is used to determine the amount of benefit payable.
<b>COLA</b>	None assumed.
<b>Decrement Operation</b>	Disability and withdrawal do not operate during normal retirement eligibility.
<b>Decrement Timing</b>	Normal and early retirement decrements for the Teachers group are assumed to occur at the beginning of the year. All other decrements were assumed to occur mid-year.
<b>Eligibility Testing</b>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<b>Forfeitures</b>	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.
<b>Incidence of Contributions</b>	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll at the time contributions are made.
<b>Liability Adjustments</b>	Normal, early, and vesting retirement liabilities are increased by 7.5%, 5.0%, 11.5%, and 11.5% for Employees, Teachers, Police, and Fire respectively to account for lump sum payments. 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.
<b>Marriage Assumption</b>	Group I: 60% of males and 60% of females are assumed to be married for purposes of death-in-service benefits. Group II: 60% of males and 60% of females are assumed to be married for purposes of death-in-service and death after retirement benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
<b>Normal Form of Benefit</b>	Group I: The assumed normal form of benefit is a straight life benefit. Group II: The assumed normal form of benefit is straight life for single members and joint and 50% survivor for married members.
<b>Pay Increase Timing</b>	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
<b>Service Credit Accruals</b>	It is assumed that members accrue one year of service credit per year.
<b>Data Adjustments</b>	For the June 30, 2016 interim valuation, new active member pays were annualized.
<b>Medical Subsidy</b>	The solvency rate for the medical subsidy benefits were determined to provide an estimated margin of 20% of the benefits payable by June 30, 2016.

**GROUP I—EMPLOYEES**

**SEPARATIONS FROM ACTIVE SERVICE:** Representative values of the assumed annual rates of withdrawal and vesting, death, disability, and normal retirement are as follows:

Annual Rate of							
Age	Years of Service	Withdrawal and Vesting		Death*		Disability**	
		Men	Women	Men	Women	Men	Women
	0	23.00%	30.00%				
	1	20.00	22.00				
	2	15.00	16.00				
	3	12.00	12.00				
	4	10.00	7.20				
25	5+	7.20	7.20	.05%	.02%	.03%	.02%
30		7.20	5.04	.05	.03	.03	.02
35		5.04	5.04	.05	.04	.03	.03
40		5.04	5.04	.07	.05	.08	.06
45		5.04	5.04	.10	.08	.16	.11
50		3.96	3.96	.19	.13	.27	.23
55		3.60	3.60	.32	.21	.47	.42
60		3.60	3.60	—	—	—	—

Annual Rate of Normal Retirement					
Age	For Members Hired Prior to July 1, 2011		For Members Hired On or After July 1, 2011		
	Men	Women	Men	Women	
60	11.00%	11.00%	—	—	
61	11.00	11.00	—	—	
62	16.00	15.00	—	—	
63	16.00	14.00	—	—	
64	14.00	14.00	—	—	
65	16.00	20.00	45.00%	44.00%	
66	25.00	22.00	45.00	44.00	
67	23.00	22.00	23.00	22.00	
68	21.00	18.00	21.00	18.00	
69	20.00	19.00	20.00	19.00	
70	100.00	100.00	100.00	100.00	

\*98% are assumed to be ordinary death and 2% are assumed to be accidental death.  
 \*\*50% are assumed to be ordinary disability and 50% are assumed to be accidental disability.

**SALARY INCREASES:** Representative values of the assumed rates of future salary increases are as follows:

Service Index	Merit & Seniority	Base	Annual Rate of Salary Increases
1	10.00%	3.25%	13.25%
2	6.00	3.25	9.25
3	2.50	3.25	5.75
4	2.00	3.25	5.25
5	1.50	3.25	4.75
6	1.25	3.25	4.50
7-9	1.00	3.25	4.25
10-25	0.50	3.25	3.75

**DEATHS AFTER RETIREMENT:**

MORTALITY RATE			MORTALITY RATE		
AGE	MEN	WOMEN	AGE	MEN	WOMEN
35	.11%	.11%	60	.77%	.53%
40	.17	.16	65	1.08	.78
45	.25	.20	70	1.66	1.28
50	.38	.26	75	2.71	2.11
55	.56	.38	80	4.57	3.57

**GROUP I—TEACHERS**

**SEPARATIONS FROM ACTIVE SERVICE:** Representative values of the assumed annual rates of withdrawal and vesting, death, disability, and normal retirement are as follows:

Age	Years of Service	Annual Rate of					
		Withdrawal and Vesting		Death*		Disability**	
		Men	Women	Men	Women	Men	Women
	0	35.00%	31.00%				
	1	17.00	16.00				
	2	14.00	13.00				
	3	10.00	11.00				
	4	8.00	8.00				
25	5+	4.00	6.00	.04%	.01%	.01%	.00%
30		4.00	6.00	.04	.02	.01	.00
35		2.80	4.20	.05	.03	.02	.01
40		2.80	4.20	.06	.04	.04	.04
45		2.80	4.20	.09	.06	.07	.06
50		2.20	3.30	.16	.09	.07	.11
55		2.00	3.00	.27	.15	.38	.35
60		2.00	3.00	—	—	—	—

\*98% are assumed to be ordinary death and 2% are assumed to be accidental death.

\*\*50% are assumed to be ordinary disability and 50% are assumed to be accidental disability.

Age	Annual Rate of Normal Retirement			
	For Members Hired Prior to July 1, 2011		For Members Hired On or After July 1, 2011	
	Men	Women	Men	Women
60	18.00%	13.00%	—	—
61	19.00	15.00	—	—
62	20.00	19.00	—	—
63	21.00	19.00	—	—
64	22.00	21.00	—	—
65	23.00	25.00	58.00%	56.00%
66	30.00	32.00	58.00	56.00
67	25.00	27.00	25.00	27.00
68	25.00	27.00	25.00	27.00
69	25.00	27.00	25.00	27.00
70	100.00	100.00	100.00	100.00

**SALARY INCREASES:** Representative values of the assumed rates of future salary increases are as follows:

Service Index	Merit & Seniority	Base	Annual Rate of Salary Increases
1	10.00%	3.25%	13.25%
2	6.00	3.25	9.25
3	3.25	3.25	6.50
4	2.75	3.25	6.00
5	2.50	3.25	5.75
6	2.25	3.25	5.50
7	2.00	3.25	5.25
8	1.75	3.25	5.00
9	1.50	3.25	4.75
10	1.25	3.25	4.50
11–25	1.00	3.25	4.25

**DEATHS AFTER RETIREMENT:**

AGE	MORTALITY RATE		AGE	MORTALITY RATE	
	MEN	WOMEN		MEN	WOMEN
35	.11%	.11%	60	.77%	.53%
40	.17	.16	65	1.08	.78
45	.25	.20	70	1.66	1.28
50	.38	.26	75	2.71	2.11
55	.56	.38	80	4.57	3.57

**GROUP II – POLICE OFFICERS**

**SEPARATIONS FROM ACTIVE SERVICE:** Representative values of the assumed annual rates of withdrawal, vesting, death, disability, and retirement are as follows:

Age	Years of Service	Annual Rate of					
		Withdrawal and Vesting		Death*		Disability**	
		Men	Women	Men	Women	Men	Women
	0	25.00%	30.00%				
	1	15.00	20.00				
	2	10.00	13.00				
	3	7.00	11.50				
	4	5.00	10.00				
25	5+	5.88	5.88	.04%	.02%	.03%	.03%
30		4.93	4.93	.04	.02	.03	.03
35		4.13	4.13	.05	.03	.07	.07
40		3.45	3.45	.06	.04	.16	.16
45		2.83	2.83	.09	.07	.28	.28
50		2.40	2.40	.16	.11	.45	.45
55		1.98	1.98	.27	.18	.67	.67
60		1.60	1.60	—	—	—	—

**SALARY INCREASES:** Representative values of the assumed rates of future salary increases are as follows:

Service Index	Merit & Seniority	Base	Annual Rate of Salary Increases
1	22.00%	3.25%	25.25%
2	15.00	3.25	18.25
3	7.00	3.25	10.25
4	5.00	3.25	8.25
5	3.75	3.25	7.00
6	2.50	3.25	5.75
7	2.00	3.25	5.25
8	1.50	3.25	4.75
9-25	1.00	3.25	4.25

**DEATHS AFTER RETIREMENT:**

AGE	MORTALITY RATE		AGE	MORTALITY RATE	
	MEN	WOMEN		MEN	WOMEN
35	.11%	.11%	60	.77%	.53%
40	.17	.16	65	1.08	.78
45	.25	.20	70	1.66	1.28
50	.38	.26	75	2.71	2.11
55	.56	.38	80	4.57	3.57

**NORMAL RETIREMENT**

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	22%					
46	22%	27%				
47	22%	27%	31%			
48	22%	25%	31%	34%		
49	22%	25%	31%	34%	38%	
50	22%	25%	27%	34%	38%	40%
51	22%	22%	27%	31%	38%	40%
52	22%	22%	22%	31%	33%	40%
53	22%	22%	22%	22%	33%	38%
54	22%	22%	22%	22%	22%	38%
55	22%	22%	22%	22%	22%	22%
56	22%	22%	22%	22%	22%	22%
57	22%	22%	22%	22%	22%	22%
58	22%	22%	22%	22%	22%	22%
59	22%	22%	22%	22%	22%	22%
60	22%	22%	22%	22%	22%	22%
61	22%	20%	20%	20%	20%	20%
62	22%	22%	22%	22%	22%	22%
63	22%	22%	22%	22%	22%	22%
64	20%	20%	20%	20%	20%	20%
65	25%	25%	25%	25%	25%	25%
66	50%	50%	50%	50%	50%	50%
67	50%	50%	50%	50%	50%	50%
68	50%	50%	50%	50%	50%	50%
69	50%	50%	50%	50%	50%	50%
70	100%	100%	100%	100%	100%	100%

**GROUP II – FIREFIGHTERS**

**SEPARATIONS FROM ACTIVE SERVICE:** Representative values of the assumed annual rates of withdrawal and vesting, death, disability, and retirement are as follows:

Age	Years of Service	Annual Rate of					
		Withdrawal and Vesting		Death*		Disability**	
		Men	Women	Men	Women	Men	Women
	0	7.75%	7.75%				
	1	4.50	4.50				
	2	3.00	3.00				
	3	2.75	2.75				
	4	2.25	2.25				
25	5+	1.25	1.25	.04%	.01%	.06%	.06%
30		1.25	1.25	.04	.02	.07	.07
35		1.25	1.25	.05	.03	.09	.09
40		1.25	1.25	.06	.04	.12	.12
45		1.25	1.25	.09	.06	.18	.18
50		1.25	1.25	.16	.11	.27	.27
55		1.25	1.25	.27	.17	.40	.40
60		1.25	1.25	—	—	—	—

**SALARY INCREASES:** Representative values of the assumed rates of future salary increases are as follows:

Service Index	Merit & Seniority	Base	Annual Rate of Salary Increases
1	22.00%	3.25%	25.25%
2	15.00	3.25	18.25
3	7.00	3.25	10.25
4	5.00	3.25	8.25
5	3.75	3.25	7.00
6	2.50	3.25	5.75
7	2.00	3.25	5.25
8	1.50	3.25	4.75
9-25	1.00	3.25	4.25

**DEATHS AFTER RETIREMENT:**

AGE	MORTALITY RATE		AGE	MORTALITY RATE	
	MEN	WOMEN		MEN	WOMEN
35	.11%	.11%	60	.77%	.53%
40	.17	.16	65	1.08	.78
45	.25	.20	70	1.66	1.28
50	.38	.26	75	2.71	2.11
55	.56	.38	80	4.57	3.57

**NORMAL RETIREMENT**

Retirement Ages	% of Active Members Retiring Within Next Year	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				
		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	12%					
46	12%	15%				
47	12%	15%	18%			
48	12%	15%	18%	22%		
49	12%	15%	18%	22%	26%	
50	17%	15%	18%	21%	26%	30%
51	17%	17%	18%	21%	26%	30%
52	17%	17%	17%	21%	21%	30%
53	17%	17%	17%	17%	21%	22%
54	17%	17%	17%	17%	17%	22%
55	22%	22%	22%	22%	22%	22%
56	22%	22%	22%	22%	22%	22%
57	22%	22%	22%	22%	22%	22%
58	22%	22%	22%	22%	22%	22%
59	22%	22%	22%	22%	22%	22%
60	28%	28%	28%	28%	22%	28%
61	28%	28%	28%	28%	28%	28%
62	28%	28%	28%	28%	28%	28%
63	28%	28%	28%	28%	28%	28%
64	28%	28%	28%	28%	28%	28%
65	28%	28%	28%	28%	28%	28%
66	28%	28%	28%	28%	28%	28%
67	28%	28%	28%	28%	28%	28%
68	28%	28%	28%	28%	28%	28%
69	28%	28%	28%	28%	28%	28%
70	100%	100%	100%	100%	100%	100%



## HISTORICAL MEMBERSHIP DATA — ACTIVE AND RETIRED

The following 4 tables summarize the actuarial valuation data for the period from 2009 through 2013. Valuations are prepared biennially. An interim valuation was prepared in fiscal year 2008, 2010 and in fiscal year 2012.

### EMPLOYEES (aggregate compensation and annual allowance dollars in thousands)

#### ACTIVE MEMBERSHIP DATA

FISCAL YEAR	NUMBER OF ACTIVES**	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
2016	24,520	\$1,136,451	\$ 46,348	(0.14%)
2015	24,298	1,127,766	46,414	4.66%
2014	25,545	1,088,508	44,347	1.94%
2013	24,809	1,079,245	43,502	(0.03%)
2012	24,747	1,076,831	43,514	(0.23%)
2011	25,539	1,113,867	43,614	3.68%

#### RETIRED MEMBERSHIP DATA

FISCAL YEAR	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS END OF YEAR		% INCREASE IN ANNUAL ALLOWANCES
	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES	
2016	1,134	\$19,332	475	\$4,636	16,142	\$223,130	7.05%
2015	1,504	21,357	1,335	10,968	15,483	208,434	5.25%
2014	1,094	15,784	492	5,431	15,314	198,045	5.52%
2013	1,110	16,335	539	6,699	14,712	187,692	5.41%
2012	1,111	14,711	457	4,890	14,141	178,056	5.84%
2011	1,113	16,521	428	4,578	13,487	168,235	7.64%

### TEACHERS (aggregate compensation and annual allowance dollars in thousands)

#### ACTIVE MEMBERSHIP DATA

FISCAL YEAR	NUMBER OF ACTIVES**	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
2016	17,784	\$1,065,621	\$ 59,920	1.15%
2015	17,732	1,050,447	59,240	3.06%
2014	17,986	1,033,867	57,482	(0.04%)
2013	18,084	1,039,934	57,506	0.75%
2012	18,161	1,036,605	57,079	1.70%
2011	18,466	1,036,376	56,123	2.28%

#### RETIRED MEMBERSHIP DATA

FISCAL YEAR	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS END OF YEAR		% INCREASE IN ANNUAL ALLOWANCES
	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES	
2016	760	\$19,954	209	\$5,325	11,410	\$263,964	5.87%
2015	840	21,653	946	6,891	10,859	249,335	6.25%
2014	744	17,222	186	4,802	10,965	234,663	5.59%
2013	698	15,844	247	5,860	10,407	222,243	4.70%
2012	712	16,420	183	5,150	9,956	212,259	5.61%
2011	504	10,402	164	3,644	9,427	200,989	3.48%

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

\*\*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.

\*\*\*Excludes temporary inactive members.

**POLICE OFFICERS** (aggregate compensation and annual allowance dollars in thousands)

**ACTIVE MEMBERSHIP DATA**

FISCAL YEAR	NUMBER OF ACTIVES***	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
2016	4,139	\$ 280,577	\$ 67,789	1.22%
2015	4,174	279,555	66,975	3.15%
2014	4,166	270,497	64,930	1.91%
2013	4,187	266,775	63,715	0.20%
2012	4,118	261,865	63,590	1.20%
2011	4,130	259,509	62,835	2.86%

**RETIRED MEMBERSHIP DATA**

FISCAL YEAR	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS END OF YEAR		% INCREASE IN ANNUAL ALLOWANCES
	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES	
2016	239	\$10,027	67	\$1,339	3,629	\$129,690	7.18%
2015	282	7,303	107	1,675	3,457	121,002	4.88%
2014	178	6,420	59	1,304	3,282	115,374	4.64%
2013	247	8,189	65	1,464	3,163	110,258	6.50%
2012	171	6,977	70	1,008	2,981	103,533	6.12%
2011	237	10,730	59	1,133	2,880	97,564	10.46%

**FIREFIGHTERS** (aggregate compensation and annual allowance dollars in thousands)

**ACTIVE MEMBERSHIP DATA**

FISCAL YEAR	NUMBER OF ACTIVES***	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
2016	1,626	\$ 118,754	\$ 73,034	0.15%
2015	1,608	117,263	72,925	2.07%
2014	1,610	115,027	71,445	(0.78%)
2013	1,608	115,788	72,007	2.39%
2012	1,599	112,456	70,329	4.36%
2011	1,603	108,028	67,391	1.75%

**RETIRED MEMBERSHIP DATA**

FISCAL YEAR	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS END OF YEAR		% INCREASE IN ANNUAL ALLOWANCES
	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES	
2016	75	\$4,177	31	\$ 936	1,595	\$61,492	5.56%
2015	105	4,546	47	882	1,551	58,251	6.71%
2014	89	2,774	43	1,139	1,493	54,587	3.09%
2013	98	3,497	27	715	1,447	52,952	5.55%
2012	79	3,105	39	495	1,376	50,170	5.49%
2011	111	5,051	29	696	1,336	47,560	10.08%

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

\*\*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.

\*\*\*Excludes temporary inactive members.

## SOLVENCY TEST

### TOTAL OF ALL GROUPS

(dollars in thousands)

Fiscal Year	Projected Liabilities For			Net Position Held For Benefits	Percentage of Accrued Liabilities Covered By Net Position Held for Benefits		
	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*		(1)	(2)	(3)
2016	\$2,978,817	\$6,964,227	\$2,789,821	\$7,636,066	100.00%	67.00%	0.00%
2015	\$2,886,196	\$3,210,280	\$1,820,582	\$4,862,256	100.00%	82.00%	0.00%
2014	\$2,842,340	\$5,789,052	\$2,413,782	\$6,700,553	100.00%	67.00%	0.00%
2013	\$2,808,526	\$5,519,814	\$2,380,428	\$6,070,681	100.00%	59.00%	0.00%
2012	\$2,773,081	\$5,246,672	\$2,341,847	\$5,817,882	100.00%	58.00%	0.00%
2011	\$2,631,430	\$4,959,865	\$2,406,956	\$5,740,516	100.00%	63.00%	0.00%

### EMPLOYEES

(dollars in thousands)

Fiscal Year	Projected Liabilities For			Net Position Held For Benefits	Percentage of Accrued Liabilities Covered By Net Position Held for Benefits		
	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*		(1)	(2)	(3)
2016	\$1,152,928	\$2,139,549	\$857,347	\$2,538,563	100.00%	65.00%	0.00%
2015	\$1,107,866	\$1,916,257	\$840,426	\$2,403,294	100.00%	68.00%	0.00%
2014	\$1,083,878	\$1,823,517	\$784,437	\$2,195,284	100.00%	61.00%	0.00%
2013	\$1,069,628	\$1,729,855	\$755,482	\$1,977,479	100.00%	52.00%	0.00%
2012	\$1,052,106	\$1,641,026	\$756,255	\$1,877,395	100.00%	50.00%	0.00%
2011	\$995,389	\$1,548,109	\$810,983	\$1,834,609	100.00%	54.00%	0.00%

### TEACHERS

(dollars in thousands)

Fiscal Year	Projected Liabilities For			Net Position Held For Benefits	Percentage of Accrued Liabilities Covered By Net Position Held for Benefits		
	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*		(1)	(2)	(3)
2016	\$1,171,831	\$2,692,037	\$1,156,821	\$2,799,863	100.00%	60.00%	0.00%
2015	\$1,127,439	\$2,323,302	\$988,870	\$2,682,083	100.00%	67.00%	0.00%
2014	\$1,113,650	\$2,198,892	\$966,511	\$2,482,496	100.00%	62.00%	0.00%
2013	\$1,107,192	\$2,087,926	\$977,937	\$2,255,011	100.00%	55.00%	0.00%
2012	\$1,101,262	\$1,999,152	\$949,670	\$2,173,315	100.00%	50.00%	0.00%
2011	\$1,041,699	\$1,893,862	\$973,407	\$2,153,182	100.00%	59.00%	0.00%

\*Liabilities for active members are based on service as of the valuation date and projected compensation at the member's expected retirement date. Also includes terminated vested members.

NOTE: Based on a 7.75% interest rate for fiscal year 2011 and later, and an 8.5% interest rate for fiscal year 2010.

**POLICE OFFICERS**

(dollars in thousands)

Fiscal Year	Projected Liabilities For			Net Position Held For Benefits	Percentage of Accrued Liabilities Covered By Net Position Held for Benefits		
	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*		(1)	(2)	(3)
2016	\$ 430,490	\$1,460,840	\$535,225	\$ 1,546,665	100.00%	76.00%	0.00%
2015	\$ 429,115	\$1,266,591	\$463,902	\$ 1,477,517	100.00%	83.00%	0.00%
2014	\$ 422,972	\$1,209,741	\$454,133	\$ 1,361,280	100.00%	78.00%	0.00%
2013	\$ 417,630	\$1,160,173	\$438,580	\$ 1,236,579	100.00%	71.00%	0.00%
2012	\$ 411,672	\$1,092,005	\$949,670	\$ 1,189,308	100.00%	71.00%	0.00%
2011	\$ 396,344	\$1,030,900	\$432,256	\$ 1,179,798	100.00%	76.00%	0.00%

**FIREFIIGHTERS**

(dollars in thousands)

Fiscal Year	Projected Liabilities For			Net Position Held For Benefits	Percentage of Accrued Liabilities Covered By Net Position Held for Benefits		
	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*		(1)	(2)	(3)
2016	\$ 223,568	\$671,801	\$240,428	\$ 750,975	100.00%	79.00%	0.00%
2015	\$ 221,776	\$592,362	\$210,708	\$ 718,867	100.00%	84.00%	0.00%
2014	\$ 221,840	\$556,902	\$208,701	\$ 661,493	100.00%	79.00%	0.00%
2013	\$ 214,076	\$541,860	\$208,430	\$ 601,612	100.00%	72.00%	0.00%
2012	\$ 208,041	\$514,489	\$203,805	\$ 577,864	100.00%	72.00%	0.00%
2011	\$ 197,998	\$486,994	\$190,310	\$ 572,927	100.00%	77.00%	0.00%

\*Liabilities for active members are based on service as of the valuation date and projected compensation at the member's expected retirement date. Also includes terminated vested members.

NOTE: Based on a 7.75% interest rate for fiscal year 2011 and later, and an 8.5% interest rate for fiscal year 2010.

**ANALYSIS OF  
PAST FINANCIAL  
EXPERIENCE**

This presentation shows the experience of actual financial results relative to expected results. It is an analysis which focuses on actuarial gains and losses over the most recent five actuarial valuations and reconciles the difference in the actuarial normal contribution rates from the expected to actual values.

**RECONCILIATION OF EMPLOYER NORMAL RATE \***

**EMPLOYEES**

YEAR ENDED	June 30, 2015		June 30, 2013		June 30 2011	June 30 2009	June 30 2007
	State Employees	Political Subdivision Employees	State Employees	Political Subdivision Employees			
Projected Normal Rate*	10.34%	10.34%	10.51%	10.44%	10.71%	9.09%	8.74%
Decremental Experience	—	—	—	—	—	—	—
Pensioner's Experience	—	—	—	—	—	—	—
Excess Salary Increases	—	—	—	—	—	—	—
Method Change	—	—	—	—	—	—	0.98
Effect of Legislation	—	—	—	—	(1.95)	(0.15)	(0.57)
Asset (Gains)/Losses	(0.44)	(0.44)	0.52	0.52	0.31	1.18	(0.36)
Current New Entrants	—	—	—	—	—	—	—
Amendments	—	—	—	—	—	—	—
Target Rate System Experience	—	—	—	—	—	—	—
Assumption Changes	1.18	1.18	—	—	1.01	—	0.41
Other (Gains)/Losses	—	—	( 0.17)	( 0.10)	0.36	0.59	(0.11)
<b>ACTUAL NORMAL RATE</b>	<b>11.08%</b>	<b>11.08%</b>	<b>10.86%</b>	<b>10.86%</b>	<b>10.44%</b>	<b>10.71%</b>	<b>9.09%</b>

**TEACHERS**

YEAR ENDED	June 30 2015	June 30 2013	June 30 2011	June 30 2009	June 30 2007	June 30 2005
Projected Normal Rate *	12.09%	11.96%	11.51%	9.38%	8.93%	4.67%
Decremental Experience	—	—	—	—	—	(.01)
Pensioner's Experience	—	—	—	—	—	—
Excess Salary Increases	—	—	—	—	—	.09
Method Change	—	—	—	—	0.82	—
Effect of Legislation	—	—	(2.27)	—	(0.72)	—
Asset (Gains)/Losses	(0.30)	0.61	0.39	1.55	(0.46)	1.52
Current New Entrants	—	—	—	—	—	.02
Amendments	—	—	—	—	—	—
Target Rate System Experience	—	—	—	—	—	1.14
Assumption Changes	3.91	—	2.05	—	0.80	.90
Other (Gains)/Losses	—	0.15	0.28	0.58	0.01	.60
<b>ACTUAL NORMAL RATE</b>	<b>15.70%</b>	<b>12.72%</b>	<b>11.96%</b>	<b>11.51%</b>	<b>9.38%</b>	<b>8.93%</b>

\*Based on forecast valuations.

This presentation shows the experience of actual financial results relative to expected results. It is an analysis which focuses on actuarial gains and losses over the most recent five actuarial valuations and reconciles the difference in the actuarial normal contribution rates from the expected to actual values.

**RECONCILIATION OF EMPLOYER NORMAL RATE \***

**POLICE OFFICERS**

YEAR ENDED	June 30, 2015		June 30, 2013		June 30	June 30	June 30	June 30
	State Police Officers	Political Subdivision Police Officers	State Police Officers	Political Subdivision Police Officers	2011	2009	2007	2005
Projected Normal Rate *	20.88%	20.88%	21.45%	21.35%	22.92%	17.34%	18.21%	12.33%
Decremental Experience	—	—	—	—	—	—	—	.38
Pensioner's Experience	—	—	—	—	—	—	—	.01
Excess Salary Increases	—	—	—	—	—	—	—	(.12)
Method Change	—	—	—	—	—	—	1.11	—
Effect of Legislation	—	—	—	—	(7.15)	—	(2.17)	—
Asset (Gains)/Losses	(1.57)	(1.57)	1.31	1.31	0.85	2.89	(0.90)	1.85
Current New Entrants	—	—	—	—	—	—	—	.16
Amendments	—	—	—	—	—	—	—	—
Target Rate System Experience	—	—	—	—	—	—	—	1.47
Assumption Changes	6.02	6.02	—	—	4.00	—	0.31	2.08
Other Asset (Gains)/Losses	—	—	( 0.22)	( 0.12)	0.73	2.69	0.78	.05
<b>ACTUAL NORMAL RATE</b>	<b>25.33%</b>	<b>25.33%</b>	<b>22.54%</b>	<b>22.54%</b>	<b>21.35%</b>	<b>22.92%</b>	<b>17.34%</b>	<b>18.21%</b>

**FIREFIGHTERS**

YEAR ENDED	June 30, 2015		June 30, 2013		June 30	June 30	June 30	June 30
	State Firefighters	Political Subdivision Firefighters	State Firefighters	Political Subdivision Firefighters	2011	2009	2007	2005
Projected Normal Rate *	23.38%	23.38%	23.90%	23.79%	28.25%	22.52%	24.49%	16.31%
Decremental Experience	—	—	—	—	—	—	—	.04
Pensioner's Experience	—	—	—	—	—	—	—	(.06)
Excess Salary Increases	—	—	—	—	—	—	—	.17
Method Change	—	—	—	—	—	—	2.48	—
Effect of Legislation	—	—	—	—	(8.58)	—	(2.61)	—
Asset (Gains)/Losses	(1.39)	(1.39)	—	—	0.99	3.24%	(1.05)	2.23
Current New Entrants	—	—	—	—	—	—	—	.14
Amendments	—	—	—	—	—	—	—	—
Target Rate System Experience	—	—	—	—	—	—	—	6.22
Assumption Changes	5.80	5.80	—	—	3.39	—	0.21	(.32)
Other Asset (Gains)/Losses	—	—	—	—	(0.26)	2.49%	(1.00)	(.24)
<b>ACTUAL NORMAL RATE</b>	<b>27.79</b>	<b>27.79</b>	<b>25.32%</b>	<b>25.32%</b>	<b>23.79%</b>	<b>28.25%</b>	<b>22.52%</b>	<b>24.49%</b>

\*Based on forecast valuations.

**SUMMARY OF PRINCIPAL PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES**

**1 – GENERAL**

<b>Legal Plan Name</b>	New Hampshire Retirement System.
<b>Effective Date</b>	July 1, 1967.
<b>Membership</b>	Prospectively, 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.
<b>Average Final Compensation (AFC)</b>	Average annual earnable compensation during 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.
<b>NOTE:</b>	A more detailed description of the plan provisions is available from the System’s administrative office or by visiting <a href="http://www.nhrs.org">www.nhrs.org</a> .

**2 – BENEFITS**

**GROUP I MEMBERS (EMPLOYEES AND TEACHERS)**

**Service Retirement**

<b>Eligibility</b>	Age 60 years (age 65 for members commencing service on or after July 1, 2011).
<b>Amount of Benefit</b>	A member annuity equal to the actuarial equivalent of the member’s accumulated contributions plus a state annuity.  Prior to the member’s attainment of age 65, the state annuity, together with the member annuity, shall be equal to 1/60 of AFC multiplied by years of service. (1/66 of AFC times creditable service for members commencing service on or after July 1, 2011.)  After attainment of age 65, the state annuity, together with the member annuity, shall be equal to 1/66 of AFC multiplied by years of service.

**Reduced Service Retirement**

<b>Eligibility</b>	Age plus service of at least 70, provided the member has at least 20 years of service or age 50 with at least 10 years of service (age 60 with 30 years of creditable service for members commencing service on or after July 1, 2011).
<b>Amount of Benefit</b>	Service retirement benefit is reduced by the following percents for each month that benefits commence prior to age 60.

Years of Service at Retirement	Monthly Percent Reduction
35 or more	1/8 of 1%
30–35	1/4 of 1%
25–30	1/3 of 1%
20–25	5/12 of 1%
less than 20	5/9 of 1%

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

**Ordinary Disability Retirement**

<b>Eligibility</b>	10 years of service and permanent disability.
<b>Amount of Benefit</b>	Service retirement benefit if normal retirement age. Under age 60 a member annuity plus a state annuity which together equals 1.5% of AFC multiplied by the

number of years of creditable service at the time of disability; provided that the benefit shall not be less than 25% of AFC.

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#### Accidental Disability Retirement

<b>Eligibility</b>	Permanently disabled due to accident occurring while in the performance of duty.
<b>Amount of Benefit</b>	Service retirement benefit if age 60, otherwise a member annuity plus a state annuity which together equals 50% of AFC; provided that the benefit shall not be less than 50% of AFC.

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#### Ordinary Death Benefit

<b>Eligibility</b>	Death, other than accidental death.
<b>Amount of Benefit</b>	<p>(a) If 10 years of service or if eligible for service retirement and,</p> <p>(i) if survived by a spouse, 50% of the service retirement benefit payable until death or remarriage;</p> <p>(ii) if no surviving spouse or member designated a beneficiary other than a spouse, a lump sum equal to the greater of \$3,600 or the member's annual compensation.</p> <p>(b) If less than 10 years of service and if not eligible for service retirement, a lump sum equal to the greater of \$3,600 or the member's annual compensation.</p>

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#### Accidental Death Benefit

<b>Eligibility</b>	Accidental death occurring while in the performance of duty.
<b>Amount of Benefit</b>	Benefit equal to 50% of AFC.

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#### Vested Deferred Retirement

<b>Eligibility</b>	10 years of service, if no withdrawal of contributions.
<b>Amount of Benefit</b>	Payable at age 60, a member annuity plus a state annuity which together equals the service retirement benefit that would be payable after age 60. The benefit changes at age 65 as for service retirement. At any time after attainment of age 50 (age 60 for members hired on or after July 1, 2011), a member may have his benefit commence early, however, the benefit will be reduced for early commencement using the same early retirement reduction factors as described under reduced service retirement.

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#### Return of Members' Contributions

- |  |  |
|--|--|
|  | <p>(a) Upon termination of service other than for retirement or death, and if vested deferred retirement benefit has not been elected, the member's accumulated contributions are returned to him.</p> <p>(b) Upon accidental death or upon other death for which no surviving spouse's benefit is payable, the member's accumulated contributions will be paid to the member's beneficiary or estate.</p> <p>(c) Upon death prior to age 60 of a member on deferred vested retirement, the member's accumulated contributions will be paid to the member's beneficiary or estate.</p> <p>(d) Upon death of a retired member (or the survivor of a retired member, if an optional benefit was elected), the excess of his accumulated contributions at retirement over the benefits received by the retired member (and, in the case of election of an optional benefit, the benefits received by the survivor) will be paid to the beneficiary or estate of the member.</p> |
|--|--|



Special Provisions Applicable to Certain Members Transferred from the Employees' Retirement System of the State of New Hampshire

Certain employee members transferred to the New Hampshire Retirement System effective January 1, 1976 have elected to have their benefits calculated on the basis of the provisions of the Predecessor System.

**GROUP II MEMBERS (POLICE OFFICERS AND FIREFIGHTERS)**

Service Retirement

**Eligibility** 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).

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

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

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:

Creditable Service on January 1, 2012	Minimum Years of Service	Minimum Age Attained	Annuity Multiplier
(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%

Effective July 1, 1992, if a member retires on a full service retirement, the minimum annual benefit (prior to reduction for optional form of payment) is \$10,000.

Reduced Service Retirement

**Eligibility** Members commencing service on or after July 1, 2011 after attaining age 52.5 with at least 25 years of creditable service.

**Amount of Benefit** 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%.

Ordinary Disability Retirement

**Eligibility** 10 years service and permanent disability.

**Amount of Benefit** A member annuity plus a state annuity which together equals the service retirement benefit; provided that the benefit shall not be less than 25% of the member's annual compensation.

Accidental Disability Retirement

**Eligibility** Permanent disability occurring while in the performance of duty.

**Amount of 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 2/3 of AFC. If a member has more than 26-2/3 years of service, the member will

receive a supplemental disability benefit equal to 2-1/2% of AFC times years of creditable service in excess of 26-2/3 years but not in excess of 40 years. 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. 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 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.

Ordinary Death Benefit

<b>Eligibility</b>	Death other than accidental death.
<b>Amount of Benefit</b>	<p>(a) If 10 years service or if eligible for service retirement and,</p> <p>(i) if survived by a spouse, 50% of the service retirement benefit payable until death or remarriage.</p> <p>(ii) if no surviving spouse or member designated a beneficiary other than a spouse, a lump sum equal to the greater of \$3,600 or member's annual compensation.</p> <p>(b) If less than 10 years service and not eligible for service retirement, a lump sum equal to the greater of \$3,600 or the member's annual compensation.</p>

Accidental Death Benefit

<b>Eligibility</b>	Accidental death occurring while in the performance of duty.
<b>Amount of Benefit</b>	50% of the annual rate of compensation payable first to spouse until death or remarriage, then to children under age 18 or if no spouse or children, to dependent parent.

Death after Retirement

Retirement Prior to April 1, 1987

Lump sum of \$3,600 unless accidental disability retirement, then surviving spouse receives 50% of the retired member's disability benefits payable until death or remarriage.

Retirement 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 if member was married on the date of retirement plus a lump sum. The lump sum shall be equal to:

If retired prior to July 1, 1988:	\$ 3,600
If retired on or after July 1, 1988:	
If Group II member as of June 30, 1988	\$10,000
If becomes a Group II member after June 30, 1988 and prior to July 1, 1993	\$ 3,600

Special Death Benefit – Old Firefighter's System

Continuance of duty-connected disability benefits to spouse of deceased retired member payable until death or remarriage.

Vested Deferred Retirement

<b>Eligibility</b>	10 years of service, if no withdrawal of contributions.
<b>Amount of Benefit</b>	A benefit determined as for service retirement payable when the member would be age 45 with 20 years of service or age 60 if earlier.

Return of Members' Contributions

- (a) Upon termination of service other than for retirement or death, and if vested deferred retirement has not been elected, the member's accumulated contributions are returned to the member.
- (b) Upon accidental death or upon other death for which no surviving spouse's benefit is payable, the member's accumulated contributions will be paid to the member's beneficiary or estate.
- (c) Upon death of a member on vested deferred retirement prior to the time benefits commence, the member's accumulated contributions will be paid to the member's beneficiary or estate.
- (d) Upon death of the survivor of a member retired on accidental disability and his spouse in receipt of the accidental disability survivor benefit, the excess of the member's accumulated contributions at retirement over the benefits received by the member and the spouse will be paid to the beneficiary or estate.
- (e) Upon death of a retired member (or the survivor of a retired member, if an optional benefit was elected), the excess of accumulated contributions at retirement over the benefits received by the retired member (and, in the case of election of an optional benefit, the benefits received by the survivor) will be paid to the beneficiary or estate of the member.

**3—CONTRIBUTIONS**

**GROUP I MEMBERS (EMPLOYEES AND TEACHERS)**

<b>By Members</b>	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.
<b>By Local Employer</b>	
<b>For Employee Members</b>	100% of the normal contribution rate for their employees, plus accrued liability contributions, if any.
<b>For Teacher Members</b>	100% of the normal contribution rate for their employees, plus accrued liability contributions, if any.
<b>By the State</b>	
<b>For Employee Members</b>	100% of the normal contribution rate for its employees, plus accrued liability contributions, if any.
<b>For Teacher Members</b>	100% of the normal contribution rate for teachers employed by local employers, plus accrued liability contributions, if any.

**GROUP II MEMBERS (POLICE OFFICERS AND FIREFIGHTERS)**

<b>By Members</b>	
<b>Firefighters</b>	11.80% of earnable compensation.
<b>Police Officers</b>	11.55% of earnable compensation.
<b>By Local Employer</b>	100% of the normal contribution rate for their employees, plus accrued liability contributions, if any.
<b>By the State</b>	100% of both the normal and accrued liability contributions, if any.

**OPEB PLAN PROVISIONS**

Medical subsidy benefits provided under the OPEB plan as of July 1, 2007 are as follows:

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

The amounts above will not increase.

The following Group I members and their qualified spouses are eligible for coverage under the postemployment medical plan if they are receiving health coverage under the group plan offered by their former employer:

- Employee and teacher members of political subdivisions who were eligible to retire as of July 1, 2008 and who actually retired 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.
- 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 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.
- 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 and employee members of the State who die as the natural and proximate result of injuries suffered while in the performance of duty. Eligibility for the medical subsidy ceases when the dependent child attains age 18 or age 23, if attending school on a full-time basis, or upon the spouse's remarriage.
- Vested terminated employee members of the State (and spouses) who completed at least 20 years of creditable service and as of July 1, 2004 received an allowance and who subsequently attain age 60.
- Employee members of the State (and spouses) who retired on or before July 1, 2004 after completing at least 20 years of creditable service and who subsequently attained age 60; or after completing at least 30 years of creditable service and who subsequently attained age 55.
- 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.

The following Group II members are eligible for the postemployment medical plan:

- Group II police officer members (or beneficiaries) who are active or retired as of June 30, 2000.
- Group II firefighter members (or beneficiaries) who are active or retired as of June 30, 2000.
- Persons who prior to July 1, 1988, had completed at least 20 years of Group II service and were 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 had 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.

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NEW HAMPSHIRE RETIREMENT SYSTEM

# STATISTICAL SECTION

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[CLICK HERE TO RETURN TO TABLE OF CONTENTS](#)

**STATISTICAL  
SECTION  
SUMMARY**

The schedules that follow in this Statistical Section contain statistical and historical data that is considered useful in assessing the economic condition of the Pension and OPEB plans and for evaluating financial and demographic trends over longer periods of time. Included in this section are the following schedules:

- Schedules of Changes in Net Position for all plans for the past ten years
- Schedules of Benefit and Refund Deductions for all plans over the past ten years
- Schedules of Retired Members by Type of Benefit for all plans
- Schedules of Average Benefit Payment Amounts for all plans
- Schedules of the Principal Participating Employers for all plans
- A Listing of Participating Employers

The NHRS has prepared the data presented for the Changes in Net Position schedules, Benefit and Refund Deduction schedules, the Principal Participating Employers schedules and the Listing of Participating Employers. The schedules of Retired Members by Type of Benefit and the Schedules of Average Benefit Payments Amounts were prepared by the NHRS's actuary. Due to changes in accounting systems, some data is not available or is limited for the full ten year periods but data for the full ten year periods will be added prospectively.

The investment climate over the past decade has been volatile. Investment returns for fiscal year 2016 (1.0%), fiscal year 2015 (3.5%), fiscal year 2014 (17.6%), and fiscal year 2013 (14.5%) have offset the losses experienced during the economic crisis and recession of fiscal years 2008–2009. Although investment returns were positive overall for the decade, net investment income did not achieve the assumed investment return assumption for that period. In absolute dollars, employer contributions to the pension plan have risen 197% over the decade, member contributions to the pension plan were 24% higher a decade ago because of a voluntary service purchase opportunity that was available in 2007 that is no longer available. Pension benefits rose 94% over the decade. Similar increases have been experienced in OPEB contributions and benefits.

The number of NHRS retirees continues to grow along with the average annual benefits amounts paid out. The active membership rolls have remained fairly static throughout the decade but have increased slightly in fiscal years 2016 and 2015 reflecting the improved employment environment. The number of participating employers remains stable.

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**CHANGES IN NET POSITION – PENSION PLAN LAST TEN FISCAL YEARS**

	FY 2016	FY 2015	FY 2014	FY 2013
<b>Additions:</b>				
Employer Contributions	\$ 357,482	\$ 332,294	\$ 328,444	\$ 249,835
Member Contributions	207,949	204,063	199,033	196,489
Net Investment Income (Loss)	61,878	249,806	1,092,585	813,671
Postemployment Medical Plan Transfers on Behalf of Employers	—	—	—	—
Net Position Transfers	—	—	—	—
Other	—	—	—	111
<b>Total Additions to Net Position</b>	<b>\$ 627,309</b>	<b>\$ 786,163</b>	<b>\$ 1,620,062</b>	<b>\$ 1,260,106</b>
<b>Deductions:</b>				
Pension Benefits	\$ 670,360	\$ 631,312	\$ 599,476	\$ 573,469
Refunds of Contributions	24,233	26,345	26,120	23,191
Administrative Expense	7,061	7,582	7,377	6,999
Professional Fees	950	1,318	1,080	972
Other	313	308	366	818
<b>Total Deductions from Net Position</b>	<b>\$ 702,917</b>	<b>\$ 666,865</b>	<b>\$ 634,419</b>	<b>\$ 605,449</b>
<b>Change in Net Position</b>	<b>\$ (75,608)</b>	<b>\$ 119,298</b>	<b>\$ 985,643</b>	<b>\$ 654,657</b>

**CHANGES IN NET POSITION – GROUP II POLICE OFFICER & FIREFIGHTER OPEB PLAN  
LAST TEN FISCAL YEARS**

	FY 2016	FY 2015	FY 2014	FY 2013
<b>Additions:</b>				
Employer Contributions	\$ 15,854	\$ 15,958	\$ 15,438	\$ 15,260
Net Investment Income (Loss)	53	342	1,484	1,179
Net Position Transfers	—	—	—	—
Interest Income	257	349	273	243
Other	—	—	—	—
<b>Total Additions to Net Position</b>	<b>\$ 16,164</b>	<b>\$ 16,649</b>	<b>\$ 17,195</b>	<b>\$ 16,682</b>
<b>Deductions:</b>				
Benefits Paid	\$ 16,528	\$ 16,374	\$ 15,980	\$ 16,209
Postemployment Medical Plan Transfers to Pension Plan on Behalf of Employers	—	—	—	—
Net Position Transfers	—	—	—	—
Administrative Expense	6	11	10	10
Professional Fees	—	1	1	1
Other	1	1	—	1
<b>Total Deductions from Net Position</b>	<b>\$ 16,535</b>	<b>\$ 16,387</b>	<b>\$ 15,991</b>	<b>\$ 16,221</b>
<b>Change in Net Position</b>	<b>\$ (371)</b>	<b>\$ 262</b>	<b>\$ 1,204</b>	<b>\$ 461</b>

(in thousands)

FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
\$ 254,557	\$ 274,582	\$ 269,677	\$ 196,214	\$ 188,197	\$ 120,438
199,593	152,412	149,512	142,528	157,985	272,369
19,811	1,121,460	546,492	(\$ 962,057)	(\$ 284,095)	769,701
—	—	—	—	—	58,201
—	—	89,505	—	—	295,392
—	13,399	( 1,292)	622	1,721	86
<b>\$ 473,961</b>	<b>\$ 1,561,853</b>	<b>\$ 1,053,894</b>	<b>(\$ 622,693)</b>	<b>\$ 63,808</b>	<b>\$ 1,516,187</b>
\$ 547,051	\$ 519,970	\$ 490,075	\$ 452,380	\$ 391,929	\$ 344,851
26,535	22,830	21,851	24,204	32,297	34,080
6,261	7,312	6,391	6,968	6,691	5,607
1,162	1,425	1,205	1,372	1,382	665
50	743	1,776	2,331	1,910	1,775
<b>\$ 581,059</b>	<b>\$ 552,280</b>	<b>\$ 521,298</b>	<b>\$ 487,255</b>	<b>\$ 434,209</b>	<b>\$ 386,978</b>
<b>(\$ 107,098)</b>	<b>\$ 1,009,573</b>	<b>\$ 532,596</b>	<b>(\$ 1,109,948)</b>	<b>(\$ 370,401)</b>	<b>\$ 1,129,209</b>

(in thousands)

FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
\$ 14,683	\$ 8,355	\$ 8,143	\$ 18,707	\$ 17,369	\$ 18,078
(\$ 6)	3,333	12,876	(\$ 21,012)	(\$ 5,895)	40,736
—	—	—	—	—	—
190	—	—	—	—	—
—	40	( 30)	14	36	2
<b>\$ 14,867</b>	<b>\$ 11,728</b>	<b>\$ 20,989</b>	<b>(\$ 2,291)</b>	<b>\$ 11,510</b>	<b>\$ 58,816</b>
\$ 16,231	\$ 16,019	\$ 15,916	\$ 15,688	\$ 15,229	\$ 13,672
—	—	—	—	—	18,078
—	—	89,505	—	—	160,377
(\$ 2)	22	151	152	139	295
—	5	28	30	29	25
—	2	42	51	40	90
<b>\$ 16,229</b>	<b>\$ 16,048</b>	<b>\$ 105,642</b>	<b>\$ 15,921</b>	<b>\$ 15,437</b>	<b>\$ 192,537</b>
<b>(\$ 1,362)</b>	<b>(\$ 4,320)</b>	<b>(\$ 84,653)</b>	<b>(\$ 18,212)</b>	<b>(\$ 3,927)</b>	<b>(\$ 133,721)</b>

**CHANGES IN NET POSITION – GROUP I TEACHERS OPEB PLAN  
LAST TEN FISCAL YEARS**

	FY 2016	FY 2015	FY 2014	FY 2013
<b>Additions:</b>				
Employer Contributions	\$ 31,791	\$ 22,557	\$ 23,277	\$ 23,767
Net Investment Income (Loss)	—	—	—	—
Other	—	—	—	—
<b>Total Additions to Net Position</b>	<b>\$ 31,791</b>	<b>\$ 22,557</b>	<b>\$ 23,277</b>	<b>\$ 23,767</b>
<b>Deductions:</b>				
Benefits Paid	\$ 21,772	\$ 22,762	\$ 23,750	\$ 24,731
Postemployment Medical Plan Transfers to Pension Plan on Behalf of Employers	—	—	—	—
Net Position Transfers	—	—	—	—
Administrative Expense	—	—	—	—
Professional Fees	—	—	—	—
Interest Expense	778	1,113	1,051	933
Other	—	—	—	—
<b>Total Deductions from Net Position</b>	<b>\$ 22,550</b>	<b>\$ 23,875</b>	<b>\$ 24,801</b>	<b>\$ 25,664</b>
<b>Change in Net Position</b>	<b>\$ 9,241</b>	<b>(\$ 1,318)</b>	<b>(\$ 1,524)</b>	<b>(\$ 1,897)</b>

**CHANGES IN NET POSITION – GROUP I POLITICAL SUBDIVISION  
EMPLOYEES OPEB PLAN  
LAST TEN FISCAL YEARS**

	FY 2016	FY 2015	FY 2014	FY 2013
<b>Additions:</b>				
Employer Contributions	\$ 1,938	\$ 1,848	\$ 2,010	\$ 1,885
Net Investment Income (Loss)	52	768	3,867	3,312
Net Position Transfers	—	—	—	—
Interest Income	486	745	778	690
Other	—	—	—	—
<b>Total Additions to Net Position</b>	<b>\$ 2,476</b>	<b>\$ 3,361</b>	<b>\$ 6,655</b>	<b>\$ 5,887</b>
<b>Deductions:</b>				
Benefits Paid	\$ 5,681	\$ 5,792	\$ 6,154	\$ 6,413
Postemployment Medical Plan Transfers to Pension Plan on Behalf of Employers	—	—	—	—
Net Position Transfers	—	—	—	—
Administrative Expense	6	23	26	28
Professional Fees	1	4	4	4
Other	—	1	1	3
<b>Total Deductions from Net Position</b>	<b>\$ 5,688</b>	<b>\$ 5,820</b>	<b>\$ 6,185</b>	<b>\$ 6,448</b>
<b>Change in Net Position</b>	<b>\$ (3,212)</b>	<b>(\$ 2,459)</b>	<b>\$ 470</b>	<b>(\$ 561)</b>

(in thousands)

FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
\$ 24,021	\$ 13,790	\$ 13,614	\$ 22,998	\$ 22,887	\$ 17,791
—	314	2,662	(\$ 3,701)	(\$ 1,151)	15,294
—	4	( 6)	2	7	—
<b>\$ 24,021</b>	<b>\$ 14,108</b>	<b>\$ 16,270</b>	<b>\$ 19,299</b>	<b>\$ 21,743</b>	<b>\$ 33,085</b>
\$ 25,856	\$ 26,766	\$ 26,779	\$ 24,489	\$ 21,018	\$ 17,260
—	—	—	—	—	17,791
—	—	—	—	—	78,362
—	2	31	27	27	109
—	—	6	5	5	7
921	—	—	—	—	—
—	—	9	9	7	33
<b>\$ 26,777</b>	<b>\$ 26,768</b>	<b>\$ 26,825</b>	<b>\$ 24,530</b>	<b>\$ 21,057</b>	<b>\$ 113,562</b>
<b>(\$ 2,756)</b>	<b>(\$ 12,660)</b>	<b>(\$ 10,555)</b>	<b>(\$ 5,231)</b>	<b>\$ 686</b>	<b>(\$ 80,477)</b>

(in thousands)

FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
\$ 1,928	\$ 423	\$ 404	\$ 12,381	\$ 11,420	\$ 11,858
(\$ 92)	6,460	6,239	(\$ 8,466)	(\$ 1,632)	13,254
—	—	—	—	—	—
755	—	—	—	—	—
—	77	( 15)	1,023	449	942
<b>\$ 2,591</b>	<b>\$ 6,960</b>	<b>\$ 6,628</b>	<b>\$ 4,938</b>	<b>\$ 10,237</b>	<b>\$ 26,054</b>
\$ 6,804	\$ 7,193	\$ 7,009	\$ 6,496	\$ 5,732	\$ 4,880
—	—	—	—	—	11,858
—	—	17,482	—	—	27,805
—	42	73	61	38	94
(\$ 29)	8	14	12	8	8
( 5)	5	20	21	11	29
<b>\$ 6,770</b>	<b>\$ 7,248</b>	<b>\$ 24,598</b>	<b>\$ 6,590</b>	<b>\$ 5,789</b>	<b>\$ 44,674</b>
<b>(\$ 4,179)</b>	<b>(\$ 288)</b>	<b>(\$ 17,970)</b>	<b>(\$ 1,652)</b>	<b>\$ 4,448</b>	<b>(\$ 18,620)</b>

**CHANGES IN NET POSITION – GROUP I STATE EMPLOYEES OPEB PLAN  
LAST TEN FISCAL YEARS**

	FY 2016	FY 2015	FY 2014	FY 2013
<b>Additions:</b>				
Employer Contributions	\$ 8,591	\$ 8,552	\$ 8,156	\$ 8,800
Net Investment Income (Loss)	43	9	30	(\$ 1)
Net Position Transfers	—	—	—	—
Interest Income	35	19	—	—
Other	—	—	—	—
<b>Total Additions to Net Position</b>	<b>\$ 8,669</b>	<b>\$ 8,580</b>	<b>\$ 8,186</b>	<b>\$ 8,799</b>
<b>Deductions:</b>				
Benefits Paid	\$ 7,824	\$ 8,369	\$ 7,927	\$ 7,793
Postemployment Medical Plan Transfers to Pension Plan on Behalf of Employers	—	—	—	—
Net Position Transfers	—	—	—	—
Administrative Expense	5	—	—	—
Professional Fees	1	—	—	—
Interest Expense	—	—	—	—
Other	—	—	—	—
<b>Total Deductions from Net Position</b>	<b>\$ 7,830</b>	<b>\$ 8,369</b>	<b>\$ 7,927</b>	<b>\$ 7,793</b>
<b>Change in Net Position</b>	<b>\$ 839</b>	<b>\$ 211</b>	<b>\$ 259</b>	<b>\$ 1,006</b>

(in thousands)					
FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
\$ 8,332	\$ 10,333	\$ 10,399	\$ 11,150	\$ 10,030	\$ 10,474
(\$ 66)	87	—	—	—	—
—	—	17,482	—	—	—
—	—	—	—	—	—
—	1	—	—	—	—
<b>\$ 8,266</b>	<b>\$ 10,421</b>	<b>\$ 27,881</b>	<b>\$ 11,150</b>	<b>\$ 10,030</b>	<b>\$ 10,474</b>
\$ 9,708	\$ 9,885	\$ 10,171	\$ 10,926	\$ 11,266	\$ 10,941
—	—	—	—	—	10,474
—	—	—	—	—	28,848
(\$ 21)	1	—	—	—	—
(\$ 4)	—	—	—	—	—
24	—	—	—	—	—
—	—	—	1,017	439	942
<b>\$ 9,707</b>	<b>\$ 9,886</b>	<b>\$ 10,171</b>	<b>\$ 11,943</b>	<b>\$ 11,705</b>	<b>\$ 51,205</b>
<b>\$ 1,441)</b>	<b>\$ 535</b>	<b>\$ 17,710</b>	<b>(\$ 793)</b>	<b>(\$ 1,675)</b>	<b>(\$ 40,731)</b>

## SCHEDULE OF BENEFIT AND REFUND DEDUCTIONS BY TYPE

### BENEFIT AND REFUND DEDUCTIONS BY TYPE – PENSION PLAN LAST TEN FISCAL YEARS

	FY 2016	FY 2015	FY 2014	FY 2013
<b>Type of Benefit</b>				
Age and Service Benefits:				
Service Retirement	\$ 398,056	\$ 368,298	\$ 344,810	\$ 325,542
Early Retirement	162,987	159,342	156,539	154,821
Survivors	36,989	34,572	32,444	30,738
Vested Deferred	25,937	24,161	22,463	20,730
Other	11,201	10,421	9,585	8,800
Death in Service Benefit	2,608	2,430	1,744	1,719
Disability Benefits				
Duty Related	21,599	21,152	20,837	20,674
Non Duty Related	9,200	9,047	9,080	8,787
Survivors	1,783	1,889	1,974	1,658
<b>Total Benefits</b>	<b>\$ 670,360</b>	<b>\$ 631,312</b>	<b>\$ 599,476</b>	<b>\$ 573,469</b>
<b>Type of Refund</b>				
Separation	\$ 18,856	\$ 20,121	\$ 21,429	\$ 18,133
Death	5,377	6,224	4,691	5,058
<b>Total Refunds</b>	<b>\$ 24,233</b>	<b>\$ 26,345</b>	<b>\$ 26,120</b>	<b>\$ 23,191</b>

### BENEFIT AND REFUND DEDUCTIONS BY TYPE – OPEB PLANS LAST TEN FISCAL YEARS

	FY 2016	FY 2015	FY 2014	FY 2013
<b>GROUP II POLICE OFFICERS &amp; FIREFIGHTERS</b>				
<b>Type of Benefit</b>				
Medical Subsidy Payments	\$ 16,528	\$ 16,374	\$ 15,981	\$ 16,209
<b>Total Benefits</b>	<b>\$ 16,528</b>	<b>\$ 16,374</b>	<b>\$ 15,981</b>	<b>\$ 16,209</b>
<b>GROUP I TEACHERS</b>				
<b>Type of Benefit</b>				
Medical Subsidy Payments	\$ 21,772	\$ 22,762	\$ 23,750	\$ 24,731
<b>Total Benefits</b>	<b>\$ 21,772</b>	<b>\$ 22,762</b>	<b>\$ 23,750</b>	<b>\$ 24,731</b>
<b>GROUP I POLITICAL SUBDIVISION EMPLOYEES</b>				
<b>Type of Benefit</b>				
Medical Subsidy Payments	\$ 5,681	\$ 5,792	\$ 6,154	\$ 6,413
<b>Total Benefits</b>	<b>\$ 5,681</b>	<b>\$ 5,792</b>	<b>\$ 6,154</b>	<b>\$ 6,413</b>
<b>GROUP I STATE EMPLOYEES OPEB PLAN</b>				
<b>Type of Benefit</b>				
Medical Subsidy Payments	\$ 7,824	\$ 8,369	\$ 7,927	\$ 7,793
<b>Total Benefits</b>	<b>\$ 7,824</b>	<b>\$ 8,369</b>	<b>\$ 7,927</b>	<b>\$ 7,793</b>

(in thousands)

FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
\$ 308,230	\$ 287,736	\$ 270,523	\$ 249,909	\$ 216,344	\$ 190,973
150,023	145,483	138,643	125,471	101,286	86,655
29,128	28,986	27,079	25,160	21,961	19,915
19,446	19,217	18,063	17,042	18,573	16,054
7,826	6,803	5,882	5,040	5,546	3,959
1,800	1,654	1,326	2,000	2,396	2,456
20,374	19,769	18,682	18,043	16,869	16,198
8,581	8,676	8,312	8,261	7,567	7,253
1,643	1,646	1,565	1,454	1,387	1,388
<b>\$ 547,051</b>	<b>\$ 519,970</b>	<b>\$ 490,075</b>	<b>\$ 452,380</b>	<b>\$ 391,929</b>	<b>\$ 344,851</b>
\$ 20,299	\$ 18,362	\$ 18,580	\$ 20,364	\$ 29,613	\$ 31,502
6,236	4,468	3,271	3,840	2,684	2,578
<b>\$ 26,535</b>	<b>\$ 22,830</b>	<b>\$ 21,851</b>	<b>\$ 24,204</b>	<b>\$ 32,297</b>	<b>\$ 34,080</b>

(in thousands)

FY 2012	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
\$ 16,231	\$ 16,019	\$ 15,916	\$ 15,688	\$ 15,229	\$ 13,672
<b>\$ 16,231</b>	<b>\$ 16,019</b>	<b>\$ 15,916</b>	<b>\$ 15,688</b>	<b>\$ 15,229</b>	<b>\$ 13,672</b>
\$ 25,856	\$ 26,767	\$ 26,779	\$ 24,489	\$ 21,018	\$ 17,260
<b>\$ 25,856</b>	<b>\$ 26,767</b>	<b>\$ 26,779</b>	<b>\$ 24,489</b>	<b>\$ 21,018</b>	<b>\$ 17,260</b>
\$ 6,804	\$ 7,193	\$ 7,010	\$ 6,496	\$ 5,732	\$ 4,880
<b>\$ 6,804</b>	<b>\$ 7,193</b>	<b>\$ 7,010</b>	<b>\$ 6,496</b>	<b>\$ 5,732</b>	<b>\$ 4,880</b>
\$ 9,708	\$ 9,885	\$ 10,170	\$ 10,926	\$ 11,266	\$ 10,941
<b>\$ 9,708</b>	<b>\$ 9,885</b>	<b>\$ 10,170</b>	<b>\$ 10,926</b>	<b>\$ 11,266</b>	<b>\$ 10,941</b>



## SCHEDULE OF RETIRED AND VESTED MEMBERS BY TYPE OF BENEFIT

### SCHEDULE OF RETIRED AND VESTED MEMBERS BY TYPE OF BENEFITS AS OF JUNE 30, 2016 PENSION PLAN

Amount of Monthly Benefit	Number of Retirees	Type of Retirement*						
		1	2	3	4	5	6	7
<b>EMPLOYEES</b>								
\$1-500	4,487	3,493	51	2	12	—	559	370
501-1,000	4,979	3,762	259	121	9	2	428	398
1,001-1,500	2,982	2,350	84	235	12	4	164	133
1,501-2,000	1,776	1,504	22	95	4	2	100	49
2,001-2,500	1,064	960	4	25	—	2	60	13
2,501-3,000	694	636	4	7	—	1	40	6
3,001-3,500	438	412	—	4	—	—	20	2
3,501-4,000	299	283	1	1	—	—	13	1
Over 4,000	396	383	1	2	1	—	8	1
<b>Totals</b>	<b>17,115</b>	<b>13,783</b>	<b>426</b>	<b>492</b>	<b>38</b>	<b>11</b>	<b>1,392</b>	<b>973</b>
<b>TEACHERS</b>								
\$1-500	809	541	1	—	—	—	76	191
501-1,000	1,908	1,419	40	—	3	—	121	325
1,001-1,500	1,751	1,461	73	3	4	—	100	110
1,501-2,000	1,818	1,643	29	6	5	—	81	54
2,001-2,500	1,892	1,781	17	9	—	1	66	18
2,501-3,000	1,526	1,459	8	3	—	—	48	8
3,001-3,500	1,207	1,162	3	2	—	—	37	3
3,501-4,000	678	661	—	—	1	—	14	2
Over 4,000	532	517	—	—	—	—	15	—
<b>Totals</b>	<b>12,121</b>	<b>10,644</b>	<b>171</b>	<b>23</b>	<b>13</b>	<b>1</b>	<b>558</b>	<b>711</b>
<b>POLICE OFFICERS</b>								
\$1-500	196	159	—	—	—	2	35	—
501-1,000	334	173	9	1	—	—	138	13
1,001-1,500	392	189	24	7	2	1	135	34
1,501-2,000	341	204	20	32	2	1	64	18
2,001-2,500	388	285	8	59	1	1	23	11
2,501-3,000	403	281	—	89	—	—	27	6
3,001-3,500	370	313	—	41	2	3	9	2
3,501-4,000	301	266	1	24	1	—	7	2
Over 4,000	993	930	1	47	1	1	10	3
<b>Totals</b>	<b>3,718</b>	<b>2,800</b>	<b>63</b>	<b>300</b>	<b>9</b>	<b>9</b>	<b>448</b>	<b>89</b>
<b>FIREFIGHTERS</b>								
\$1-500	45	23	—	—	—	2	20	—
501-1,000	109	38	1	—	—	—	70	—
1,001-1,500	164	69	8	5	1	5	72	4
1,501-2,000	146	67	9	11	—	1	54	4
2,001-2,500	178	110	5	21	1	3	36	2
2,501-3,000	165	128	1	25	—	—	9	2
3,001-3,500	158	133	1	17	—	2	5	—
3,501-4,000	139	129	—	8	—	1	1	—
Over 4,000	503	479	—	13	1	—	10	—
<b>Totals</b>	<b>1,607</b>	<b>1,176</b>	<b>25</b>	<b>100</b>	<b>3</b>	<b>14</b>	<b>277</b>	<b>12</b>

\* Type of Retirement: 1—Service and early retirement. 2—Ordinary disability retirement. 3—Accidental disability retirement. 4—Ordinary death in active service. 5—Accidental death in active service. 6—Beneficiaries of deceased members who retired on a service or disability allowance. 7—Vested member with future benefit.

Option Selected #										
No Option	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Other*
2,745	145	253	98	651	212	5	8	—	—	370
2,790	106	329	115	891	331	13	6	—	—	398
1,547	75	238	98	619	264	6	2	—	—	133
854	37	173	75	424	154	7	3	—	—	49
456	12	124	46	312	98	1	2	—	—	13
261	16	96	29	204	78	2	2	—	—	6
179	6	67	19	121	43	1	—	—	—	2
101	6	48	21	87	34	1	—	—	—	1
124	4	63	36	112	54	1	1	—	—	1
<b>9,057</b>	<b>407</b>	<b>1,391</b>	<b>537</b>	<b>3,421</b>	<b>1,268</b>	<b>37</b>	<b>24</b>	<b>—</b>	<b>—</b>	<b>973</b>
432	30	39	2	97	14	3	1	—	—	191
1,010	63	99	27	306	71	5	2	—	—	325
881	49	132	50	406	116	5	2	—	—	110
833	53	151	48	492	178	2	7	—	—	54
812	42	156	70	570	216	2	6	—	—	18
639	39	132	57	447	197	3	4	—	—	8
499	23	113	50	386	127	2	4	—	—	3
289	19	73	25	181	88	—	1	—	—	2
241	7	67	18	138	61	—	—	—	—	—
<b>5,636</b>	<b>325</b>	<b>962</b>	<b>347</b>	<b>3,023</b>	<b>1,068</b>	<b>22</b>	<b>27</b>	<b>—</b>	<b>—</b>	<b>711</b>
131	1	8	13	22	21	—	—	—	—	—
244	5	14	8	19	27	2	2	—	—	13
261	11	15	15	18	38	—	—	—	—	34
195	12	7	30	15	64	—	—	—	—	18
190	18	12	50	14	91	—	2	—	—	11
166	22	10	69	16	114	—	—	—	—	6
128	16	5	94	9	116	—	—	—	—	2
93	8	2	68	9	119	—	—	—	—	2
243	18	11	304	14	399	1	—	—	—	3
<b>1,651</b>	<b>111</b>	<b>84</b>	<b>651</b>	<b>136</b>	<b>989</b>	<b>3</b>	<b>4</b>	<b>—</b>	<b>—</b>	<b>89</b>
40	—	2	—	1	2	—	—	—	—	—
105	—	1	—	1	2	—	—	—	—	—
125	6	7	7	8	7	—	—	—	—	4
103	8	5	9	7	10	—	—	—	—	4
98	13	8	21	7	29	—	—	—	—	2
60	8	4	29	9	53	—	—	—	—	2
44	7	3	41	2	61	—	—	—	—	—
41	5	2	30	2	59	—	—	—	—	—
125	11	2	133	5	225	1	1	—	—	—
<b>741</b>	<b>58</b>	<b>34</b>	<b>270</b>	<b>42</b>	<b>448</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>12</b>

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

\* Elections for vested members with future benefits are made at commencement of benefits.

**SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFITS AS OF JUNE 30, 2016**  
**OPEB PLANS**

Amount of Monthly Benefit	Number of Retirees	One Person		Two Person	
		Pre 65	Post 65	Pre 65	Post 65
<b>GROUP II POLICE OFFICERS &amp; FIREFIGHTERS</b>					
\$1-500	1,714	440	1,246	14	14
501-1,000	1,046	62	252	713	19
1,001-1,500	18	3	1	9	5
1,501-2,000	7	—	—	7	—
Over \$2,000	—	—	—	—	—
<b>Total</b>	<b>2,785</b>	<b>505</b>	<b>1,499</b>	<b>743</b>	<b>38</b>
<b>GROUP I TEACHERS OPEB PLAN</b>					
\$1-500	3,710	138	3,530	—	42
501-1,000	593	33	196	62	302
1,001-1,500	26	3	13	2	8
1,501-2,000	12	1	1	10	—
Over \$2,000	—	—	—	—	—
<b>Total</b>	<b>4,341</b>	<b>175</b>	<b>3,740</b>	<b>74</b>	<b>352</b>
<b>GROUP I POLITICAL SUBDIVISION EMPLOYEES OPEB PLAN</b>					
\$1-500	1,139	54	1,080	—	5
501-1,000	98	9	48	13	28
1,001-1,500	1	—	—	—	1
1,501-2,000	—	—	—	—	—
Over \$2,000	—	—	—	—	—
<b>Total</b>	<b>1,238</b>	<b>63</b>	<b>1,128</b>	<b>13</b>	<b>34</b>
<b>GROUP I STATE EMPLOYEES OPEB PLAN</b>					
\$1-500	1,638	65	1,534	—	39
501-1,000	156	7	84	31	34
1,001-1,500	2	—	2	—	—
1,501-2,000	—	—	—	—	—
Over \$2,000	—	—	—	—	—
<b>Total</b>	<b>1,796</b>	<b>72</b>	<b>1,620</b>	<b>31</b>	<b>73</b>
<b>TOTAL – OPEB PLANS</b>					
\$1-500	8,201	697	7,390	14	100
501-1,000	1,893	111	580	819	383
1,001-1,500	47	6	16	11	14
1,501-2,000	19	1	1	17	—
Over \$2,000	—	—	—	—	—
<b>Total</b>	<b>10,160</b>	<b>815</b>	<b>7,987</b>	<b>861</b>	<b>497</b>

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## SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS

### SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS PENSION PLAN – EMPLOYEES

2016 Service	Years Credited Service						30 or more yrs.	Total
	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.		
Average monthly benefit	\$310	\$460	\$634	\$957	\$1,253	\$1,757	\$2,575	\$1,152
Average annual benefit	\$3,724	\$5,516	\$7,613	\$11,481	\$15,038	\$21,084	\$30,898	\$13,823
Average final average salary	\$42,832	\$42,359	\$41,637	\$47,544	\$49,410	\$52,267	\$65,846	\$49,468
Number of retired members	1,260*	1,706	4,007	2,573	2,520	1,514	2,562	16,142**

\* Includes 292 members who did not have service reported.

\*\* Includes 5,892 members who did not have FAS reported.

2015 Service	Years Credited Service						30 or more yrs.	Total
	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.		
Average monthly benefit	\$299	\$451	\$622	\$941	\$1,234	\$1,718	\$2,519	\$1,122
Average annual benefit	\$3,592	\$5,409	\$7,466	\$11,288	\$14,811	\$20,622	\$30,227	\$13,462
Average final average salary	\$44,554	\$43,186	\$41,904	\$47,573	\$49,030	\$55,589	\$64,928	\$49,559
Number of retired members	1,227*	1,638	3,881	2,457	2,448	1,419	2,413	15,483**

\* Includes 273 members who did not have service reported.

\*\* Includes 6,453 members who did not have FAS reported.

2014 Service	Years Credited Service						30 or more yrs.	Total
	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.		
Average monthly benefit	\$326	\$418	\$591	\$878	\$1,158	\$1,568	\$2,319	\$1,078
Average annual benefit	\$3,911	\$5,019	\$7,088	\$10,532	\$13,902	\$18,812	\$27,833	\$12,932
Average final average salary	\$35,623	\$41,017	\$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.

2013 Service	Years Credited Service						30 or more yrs.	Total
	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.		
Average monthly benefit	\$324	\$409	\$584	\$863	\$1,150	\$1,558	\$2,303	\$1,063
Average annual benefit	\$3,883	\$4,906	\$7,013	\$10,359	\$13,801	\$18,691	\$27,633	\$12,758
Average final average salary	\$35,604	\$39,229	\$40,738	\$45,238	\$47,897	\$54,324	\$63,541	\$47,906
Number of retired members	968*	1,444	3,705	2,345	2,434	1,394	2,422	14,712**

\* Includes 172 members who did not have service reported.

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

2012 Service	Years Credited Service						30 or more yrs.	Total
	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.		
Average monthly benefit	\$343	\$400	\$576	\$854	\$1,142	\$1,535	\$2,274	\$1,049
Average annual benefit	\$4,114	\$4,804	\$6,911	\$10,243	\$13,706	\$18,421	\$27,284	\$12,591
Average final average salary	\$34,356	\$38,505	\$39,797	\$44,567	\$46,998	\$52,948	\$62,444	\$47,037
Number of retired members	992*	1,389	3,511	2,261	2,340	1,323	2,325	14,141**

\* Includes 194 members who did not have service reported.

\*\* Includes 7,748 members who did not have FAS reported.

2011 Service	Years Credited Service						30 or more yrs.	Total
	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.		
Average monthly benefit	\$336	\$393	\$571	\$837	\$1,126	\$1,519	\$2,257	\$1,039
Average annual benefit	\$4,032	\$4,719	\$6,856	\$10,049	\$13,517	\$18,228	\$27,079	\$12,474
Average final average salary	\$32,512	\$37,153	\$38,954	\$43,438	\$45,838	\$51,964	\$61,282	\$46,178
Number of retired members	936*	1,341	3,334	2,144	2,226	1,277	2,229	13,487**

\* Includes 172 members who did not have service reported.

\*\* Includes 7,913 members who did not have FAS reported.

NOTE: Due to system changes, average final average salary data is only available for fiscal years 2007–2014. The available data is limited and represents average final average salary for those members who have retired since fiscal year 2004. Additional years data will be added prospectively.

2010 Service	Years Credited Service						30 or more yrs.	Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$335	\$386	\$561	\$822	\$1,110	\$1,495	\$2,222	\$1,017
Average annual benefit	\$4,017	\$4,632	\$6,738	\$9,861	\$13,321	\$17,938	\$26,660	\$12,208
Average final average salary	\$32,068	\$35,498	\$37,739	\$41,663	\$44,745	\$50,812	\$60,543	\$45,062
Number of retired members	900*	1,291	3,169	2,059	2,091	1,213	2,079	12,802**

\* Includes 161 members who did not have service reported.

\*\* Includes 8,088 members who did not have FAS reported.

2009 Service	Years Credited Service						30 or more yrs.	Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$325	\$374	\$547	\$802	\$1,084	\$1,438	\$2,152	\$975
Average annual benefit	\$3,897	\$4,493	\$6,568	\$9,627	\$13,008	\$17,259	\$25,826	\$11,697
Average final average salary	\$31,667	\$35,280	\$36,695	\$40,033	\$43,215	\$48,520	\$58,876	\$43,547
Number of retired members	876*	1,299	3,051	1,971	1,942	1,139	1,914	12,192**

\* Includes 141 members who did not have service reported.

\*\* Includes 8,241 members who did not have FAS reported.

2008 Service	Years Credited Service						30 or more yrs.	Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$314	\$368	\$538	\$785	\$1,070	\$1,428	\$2,096	\$948
Average annual benefit	\$3,766	\$4,411	\$6,454	\$9,418	\$12,846	\$17,141	\$25,150	\$11,380
Average final average salary	\$30,781	\$36,237	\$35,989	\$39,536	\$42,625	\$47,998	\$57,600	\$42,962
Number of retired members	838*	1,268	2,940	1,896	1,786	1,058	1,794	11,580**

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

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

2007 Service	Years Credited Service						30 or more yrs.	Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$312	\$338	\$515	\$751	\$1,031	\$1,380	\$1,990	\$906
Average annual benefit	\$3,740	\$4,057	\$6,180	\$9,011	\$12,371	\$16,564	\$23,878	\$10,874
Average final average salary	\$30,208	\$35,154	\$35,536	\$38,286	\$41,757	\$46,491	\$54,769	\$41,602
Number of retired members	685*	1,240	2,745	1,885	1,666	966	1,672	10,859**

\* Includes 81 members who did not have service reported.

\*\* Includes 8,518 members who did not have FAS reported.

**SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS  
PENSION PLAN – TEACHERS**

2016 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$499	\$586	\$755	\$1,193	\$1,626	\$2,097	\$2,905	\$1,928
Average annual benefit	\$5,986	\$7,029	\$9,065	\$14,316	\$19,508	\$25,166	\$34,860	\$23,134
Average final average salary	\$51,934	\$56,982	\$49,999	\$59,017	\$62,964	\$67,641	\$72,517	\$64,533
Number of retired members	278*	333	1,422	1,375	2,161	1,897	\$3,944	\$11,410**

\* Includes 125 members who did not have service reported.

\*\* Includes 4,080 members who did not have FAS reported.

2015 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$485	\$570	\$743	\$1,172	\$1,603	\$2,072	\$2,883	\$1,913
Average annual benefit	\$5,825	\$6,840	\$8,919	\$14,059	\$19,239	\$24,868	\$34,595	\$22,961
Average final average salary	\$52,242	\$56,107	\$49,238	\$58,293	\$62,540	\$67,126	\$71,943	\$64,076
Number of retired members	259*	307	1,346	1,280	2,079	1,808	3,780	10,859**

\* Includes 108 members who did not have service reported.

\*\* Includes 4,203 members who did not have FAS reported.

2014 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$457	\$531	\$702	\$1,081	\$1,459	\$1,872	\$2,702	\$1,783
Average annual benefit	\$5,480	\$6,367	\$8,419	\$12,976	\$17,506	\$22,467	\$32,419	\$21,401
Average final average salary	\$51,979	\$56,039	\$48,107	\$57,182	\$61,625	\$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.

2013 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$433	\$526	\$691	\$1,051	\$1,454	\$1,862	\$2,686	\$1,780
Average annual benefit	\$5,200	\$6,315	\$8,295	\$12,615	\$17,451	\$22,347	\$32,229	\$21,355
Average final average salary	\$51,604	\$55,373	\$47,276	\$55,688	\$60,708	\$64,999	\$70,712	\$62,669
Number of retired members	214*	255	1,260	1,155	2,045	1,795	3,683	10,407**

\* Includes 86 members who did not have service reported.

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

2012 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$434	\$491	\$684	\$1,039	\$1,447	\$1,856	\$2,673	\$1,777
Average annual benefit	\$5,203	\$5,892	\$8,214	\$12,473	\$17,363	\$22,272	\$32,080	\$21,320
Average final average salary	\$51,428	\$53,206	\$46,917	\$54,779	\$59,762	\$64,214	\$70,113	\$62,128
Number of retired members	207*	236	1,190	1,100	1,951	1,703	3,569	9,956**

\* Includes 88 members who did not have service reported.

\*\* Includes 5,098 members who did not have FAS reported.

2011 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$432	\$484	\$670	\$1,023	\$1,439	\$1,848	\$2,664	\$1,777
Average annual benefit	\$5,185	\$5,804	\$8,044	\$12,271	\$17,272	\$22,178	\$31,972	\$21,321
Average final average salary	\$50,528	\$53,243	\$45,371	\$53,207	\$58,790	\$63,226	\$69,426	\$61,398
Number of retired members	188*	214	1,111	1,021	1,859	1,608	3,426	9,427**

\* Includes 79 members who did not have service reported.

\*\* Includes 5,148 members who did not have FAS reported.

NOTE: Due to system changes, average final average salary data is only available for fiscal years 2007–2014. The available data is limited and represents average final average salary for those members who have retired since fiscal year 2004. Additional years data will be added prospectively.

2010 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$417	\$478	\$664	\$1,005	\$1,435	\$1,847	\$2,656	\$1,781
Average annual benefit	\$5,001	\$5,733	\$7,970	\$12,064	\$17,224	\$22,162	\$31,869	\$21,375
Average final average salary	\$50,790	\$52,875	\$44,197	\$51,833	\$57,897	\$62,372	\$68,973	\$60,970
Number of retired members	171*	203	1,040	965	1,793	1,570	3,345	9,087**

\* Includes 72 members who did not have service reported.

\*\* Includes 5,182 members who did not have FAS reported.

2009 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$422	\$477	\$653	\$984	\$1,409	\$1,817	\$2,591	\$1,736
Average annual benefit	\$5,069	\$5,729	\$7,838	\$11,805	\$16,910	\$21,804	\$31,096	\$20,830
Average final average salary	\$49,132	\$52,820	\$43,328	\$50,592	\$57,660	\$61,404	\$67,107	\$59,692
Number of retired members	155*	179	986	931	1,702	1,477	3,077	8,507**

\* Includes 69 members who did not have service reported.

\*\* Includes 5,217 members who did not have FAS reported.

2008 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$418	\$457	\$636	\$966	\$1,381	\$1,789	\$2,528	\$1,674
Average annual benefit	\$5,015	\$5,478	\$7,633	\$11,590	\$16,568	\$21,470	\$30,334	\$20,087
Average final average salary	\$48,040	\$53,161	\$42,990	\$50,213	\$56,717	\$60,162	\$65,739	\$58,253
Number of retired members	137*	171	929	886	1,531	1,347	2,653	7,654**

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

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

2007 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$392	\$417	\$614	\$931	\$1,348	\$1,761	\$2,446	\$1,615
Average annual benefit	\$4,708	\$5,003	\$7,363	\$11,171	\$16,172	\$21,137	\$29,353	\$19,376
Average final average salary	\$48,572	\$51,663	\$41,693	\$49,356	\$56,367	\$58,937	\$63,650	\$56,556
Number of retired members	103*	163	842	855	1,390	1,245	2,330	6,928**

\* Includes 37 members who did not have service reported.

\*\* Includes 5,209 members who did not have FAS reported.



**SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS  
PENSION PLAN – POLICE OFFICERS**

2016 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$966	\$1,424	\$6,619	\$2,253	\$3,089	\$4,554	\$6,144	\$2,978
Average annual benefit	\$11,828	\$17,092	\$19,428	\$27,032	\$37,065	\$54,651	\$73,724	\$35,737
Average final average salary	\$52,067	\$56,071	\$54,163	\$65,196	\$80,290	\$95,097	\$107,758	\$78,292
Number of retired members	384*	188	418	326	1,458	633	232	3,629**

\* Includes 245 members who did not have service reported.

\*\* Includes 1,771 members who did not have FAS reported.

2015 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$929	\$1,380	\$1,607	\$2,256	\$3,032	\$4,501	\$5,999	\$2,917
Average annual benefit	\$11,149	\$16,561	\$19,287	\$27,067	\$36,380	\$54,010	\$71,987	\$35,002
Average final average salary	\$53,397	\$57,211	\$53,878	\$64,646	\$78,872	\$94,266	\$107,053	\$77,621
Number of retired members	362*	188	396	314	1,395	599	203	3,457**

\* Includes 222 members who did not have service reported.

\*\* Includes 1,785 members who did not have FAS reported.

2014 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$1,003	\$1,380	\$1,519	\$2,111	\$2,964	\$4,362	\$5,623	\$2,929
Average annual benefit	\$12,039	\$16,555	\$18,226	\$25,335	\$35,571	\$52,347	\$67,472	\$35,154
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.

2013 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$989	\$1,402	\$1,525	\$2,096	\$2,937	\$4,304	\$5,557	\$2,905
Average annual benefit	\$11,867	\$16,827	\$18,305	\$25,149	\$35,240	\$51,642	\$66,680	\$34,859
Average final average salary	\$43,717	\$51,752	\$49,166	\$60,656	\$76,404	\$90,096	\$98,639	\$77,294
Number of retired members	273*	159	336	271	1,319	584	221	3,163**

\* Includes 177 members who did not have service reported.

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

2012 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$986	\$1,414	\$1,520	\$2,101	\$2,936	\$4,235	\$5,469	\$2,894
Average annual benefit	\$11,835	\$16,968	\$18,238	\$25,218	\$35,230	\$50,824	\$65,631	\$34,731
Average final average salary	\$43,717	\$51,792	\$48,430	\$59,074	\$75,343	\$89,117	\$98,085	\$76,294
Number of retired members	238*	151	325	255	1,255	547	210	2,981**

\* Includes 145 members who did not have service reported.

\*\* Includes 1,766 members who did not have FAS reported.

2011 Service	Years Credited Service							Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$957	\$1,386	\$1,482	\$2,072	\$2,893	\$4,082	\$5,432	\$2,823
Average annual benefit	\$11,485	\$16,635	\$17,788	\$24,867	\$34,719	\$48,981	\$65,188	\$33,876
Average final average salary	\$47,377	\$52,498	\$46,123	\$58,423	\$74,403	\$87,050	\$97,076	\$75,213
Number of retired members	230*	149	314	251	1,218	523	195	2,880**

\* Includes 140 members who did not have service reported.

\*\* Includes 1,794 members who did not have FAS reported.

NOTE: Due to system changes, average final average salary data is only available for fiscal years 2007–2014. The available data is limited and represents average final average salary for those members who have retired since fiscal year 2004. Additional years data will be added prospectively.

2010 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$942	\$1,352	\$1,483	\$2,034	\$2,845	\$3,940	\$5,114	\$2,724
Average annual benefit	\$11,310	\$16,222	\$17,792	\$24,413	\$34,137	\$47,277	\$61,371	\$32,689
Average final average salary	\$44,656	\$50,016	\$45,342	\$57,278	\$70,960	\$85,452	\$93,848	\$72,439
Number of retired members	218*	145	305	241	1,140	482	171	2,702**

\* Includes 129 members who did not have service reported.

\*\* Includes 1,814 members who did not have FAS reported.

2009 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$931	\$1,337	\$1,453	\$2,026	\$2,816	\$3,768	\$5,068	\$2,665
Average annual benefit	\$11,166	\$16,048	\$17,438	\$24,309	\$33,797	\$45,213	\$60,811	\$31,980
Average final average salary	\$42,229	\$50,574	\$44,919	\$56,748	\$70,720	\$82,705	\$91,617	\$71,464
Number of retired members	200*	139	293	232	1,093	455	153	2,565**

\* Includes 115 members who did not have service reported.

\*\* Includes 1,808 members who did not have FAS reported.

2008 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$904	\$1,319	\$1,447	\$2,012	\$2,757	\$3,631	\$4,802	\$2,580
Average annual benefit	\$10,847	\$15,829	\$17,362	\$24,149	\$33,081	\$43,574	\$57,628	\$30,961
Average final average salary	\$42,170	\$50,113	\$45,063	\$57,239	\$69,092	\$80,884	\$87,128	\$69,835
Number of retired members	191*	137	281	221	1,044	424	138	2,436**

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

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

2007 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$857	\$1,229	\$1,441	\$1,924	\$2,659	\$3,417	\$4,396	\$2,482
Average annual benefit	\$10,287	\$14,754	\$17,293	\$23,083	\$31,912	\$41,008	\$52,757	\$29,783
Average final average salary	\$42,069	\$44,602	\$45,745	\$54,398	\$68,606	\$78,547	\$82,489	\$68,235
Number of retired members	162*	130	264	225	959	411	142	2,293**

\* Includes 74 members who did not have service reported.

\*\* Includes 1,810 members who did not have FAS reported.

**SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS  
PENSION PLAN – FIREFIGHTERS**

2016 Service	Years Credited Service							Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$1,147	\$1,353	\$1,789	\$2,185	\$2,765	\$4,138	\$5,965	\$3,213
Average annual benefit	\$13,768	\$16,230	\$21,466	\$26,218	\$33,174	\$49,655	\$71,577	\$38,553
Average final average salary	\$55,226	\$57,997	\$60,126	\$70,005	\$78,510	\$91,235	\$100,861	\$84,646
Number of retired members	143*	30	96	125	617	391	193	1,595**

\* Includes 124 members who did not have service reported.

\*\* Includes 935 members who did not have FAS reported.

2015 Service	Years Credited Service							Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$1,132	\$1,417	\$1,750	\$2,114	\$2,735	\$4,101	\$5,681	\$3,130
Average annual benefit	\$13,579	\$17,007	\$20,997	\$25,371	\$32,821	\$49,215	\$68,168	\$37,557
Average final average salary	\$55,075	\$59,425	\$61,768	\$68,985	\$77,441	\$90,785	\$96,758	\$83,520
Number of retired members	139*	30	91	119	611	389	172	1,551**

\* Includes 120 members who did not have service reported.

\*\* Includes 949 members who did not have FAS reported.

2014 Service	Years Credited Service							Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$1,068	\$1,450	\$1,724	\$2,004	\$2,687	\$3,997	\$5,494	\$3,047
Average annual benefit	\$12,812	\$17,405	\$20,686	\$24,051	\$32,249	\$47,960	\$65,932	\$35,562
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.

2013 Service	Years Credited Service							Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$1,050	\$1,513	\$1,720	\$2,007	\$2,685	\$4,053	\$5,336	\$3,050
Average annual benefit	\$12,597	\$18,154	\$20,640	\$24,080	\$32,216	\$48,683	\$64,036	\$36,595
Average final average salary	\$49,479	\$64,928	\$55,062	\$62,052	\$75,328	\$90,016	\$93,076	\$81,986
Number of retired members	120*	30	82	116	577	364	158	1,447**

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

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

2012 Service	Years Credited Service							Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$1,062	\$1,523	\$1,701	\$2,072	\$2,672	\$3,956	\$5,192	\$3,038
Average annual benefit	\$12,740	\$18,280	\$20,416	\$24,865	\$32,067	\$47,475	\$62,306	\$36,461
Average final average salary	\$50,146	\$51,114	\$53,705	\$64,002	\$74,611	\$88,513	\$92,039	\$80,981
Number of retired members	96*	29	78	110	564	343	156	1,376**

\* Includes 77 members who did not have service reported.

\*\* Includes 931 members who did not have FAS reported.

2011 Service	Years Credited Service							Total
	0-4. yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.	30 or more yrs.	
Average monthly benefit	\$1,063	\$1,519	\$1,600	\$2,062	\$2,656	\$3,846	\$4,971	\$2,967
Average annual benefit	\$12,751	\$18,225	\$19,194	\$24,749	\$31,877	\$46,151	\$59,651	\$35,599
Average final average salary	\$50,146	\$51,114	\$49,051	\$64,919	\$73,582	\$86,853	\$90,415	\$79,520
Number of retired members	90*	30	73	111	555	328	149	1,336**

\*\*Includes 71 members who did not have service reported.

\*\*Includes 942 members who did not have FAS reported.

NOTE: Due to system changes, average final average salary data is only available for fiscal years 2007–2014. The available data is limited and represents average final average salary for those members who have retired since fiscal year 2004. Additional years data will be added prospectively.

2010 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$1,020	\$1,487	\$1,607	\$2,041	\$2,592	\$3,770	\$4,749	\$2,871
Average annual benefit	\$12,244	\$17,846	\$19,283	\$24,493	\$31,109	\$45,240	\$56,983	\$34,454
Average final average salary	\$55,668	\$47,729	\$50,024	\$62,405	\$71,694	\$86,042	\$89,392	\$78,232
Number of retired members	80*	28	73	109	530	304	130	1,254**

\* Includes 62 members who did not have service reported.

\*\* Includes 946 members who did not have FAS reported.

2009 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$967	\$1,439	\$1,585	\$1,998	\$2,537	\$3,707	\$4,592	\$2,794
Average annual benefit	\$11,607	\$17,274	\$19,025	\$23,973	\$30,440	\$44,489	\$55,102	\$33,533
Average final average salary	\$55,668	\$46,372	\$48,616	\$63,891	\$70,685	\$83,078	\$88,852	\$76,730
Number of retired members	78*	28	72	107	534	295	123	1,237

\*\* Includes 60 members who did not have service reported.

\*\* Includes 963 members who did not have FAS reported.

2008 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$958	\$1,438	\$1,545	\$1,958	\$2,488	\$3,661	\$4,526	\$2,743
Average annual benefit	\$11,495	\$17,254	\$18,541	\$23,499	\$29,857	\$43,934	\$54,311	\$32,914
Average final average salary	\$55,668	\$42,455	\$46,301	\$64,705	\$69,420	\$83,187	\$87,553	\$76,307
Number of retired members	74*	27	70	105	523	287	114	1,200**

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

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

2007 Service	Years Credited Service						30 or more yrs.	Total
	0-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-29 yrs.		
Average monthly benefit	\$924	\$1,286	\$1,534	\$1,933	\$2,396	\$3,495	\$4,229	\$2,651
Average annual benefit	\$11,091	\$15,431	\$18,407	\$23,199	\$28,751	\$41,935	\$50,743	\$31,807
Average final average salary	\$57,429	\$0	\$45,518	\$64,027	\$69,135	\$82,005	\$86,698	\$75,540
Number of retired members	67*	22	73	108	488	297	113	1,168**

\* Includes 47 members who did not have service reported.

\*\* Includes 978 members who did not have FAS reported.

**SCHEDULES OF AVERAGE BENEFIT PAYMENT AMOUNTS – OPEB PLANS\***  
**GROUP II – POLICE OFFICERS AND FIREFIGHTERS**

	Service	2016	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$391	\$403
Annual Benefits			\$290,760	\$376,974
Number of retired members			62	78
**Includes 19 members who did not have service reported.				
	Service	2015	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$392	\$405
Annual Benefits			\$291,312	\$407,761
Number of retired members			62	84
**Includes 19 members who did not have service reported.				
	Service	2014	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$431	\$425
Annual Benefits			\$300,025	\$412,628
Number of retired members			58	81
**Includes 16 members who did not have service reported.				
	Service	2013	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$465	\$469
Annual Benefits			\$407,321	\$512,068
Number of retired members			73	91
**Includes 16 members who did not have service reported.				
	Service	2012	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$419	\$460
Annual Benefits			\$322,069	\$496,368
Number of retired members			64	90
**Includes 19 members who did not have service reported.				
	Service	2011	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$433	\$459
Annual Benefits			\$327,489	\$512,666
Number of retired members			63	93
**Includes 17 members who did not have service reported.				
	Service	2010	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$447	\$472
Annual Benefits			\$343,140	\$509,409
Number of retired members			64	90
**Includes 17 members who did not have service reported.				
	Service	2009	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$442	\$481
Annual Benefits			\$333,960	\$525,662
Number of retired members			63	91
**Includes 16 members who did not have service reported.				
	Service	2008	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit			\$438	\$480
Annual Benefits			\$331,421	\$512,554
Number of retired members			63	89
**Includes 17 members who did not have service reported.				
	Service	2007	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit	\$421	\$436	\$482	\$460
Annual Benefits			\$257,860	\$402,482
Total Retirees			51	77
**Includes 11 members who did not have service reported.				

\*Data prior to fiscal year 2007 is not available. Data for future fiscal years will be added prospectively.

10-14 yrs.	15-19 yrs.	20-24 yrs.	2016 25-29 yrs.	30 or more yrs.	Total
\$437	\$422	\$496	\$541	\$530	\$497
\$928,843	\$927,219	\$7,649,272	\$4,372,155	\$2,078,088	\$16,623,311
177	183	1,285	673	327	2,785

10-14 yrs.	15-19 yrs.	20-24 yrs.	2015 25-29 yrs.	30 or more yrs.	Total
\$457	\$425	\$504	\$542	\$519	\$501
\$970,582	\$892,798	\$7,674,258	\$4,303,589	\$1,793,931	\$16,334,231
177	175	1,270	662	288	2,718

10-14 yrs.	15-19 yrs.	20-24 yrs.	2014 25-29 yrs.	30 or more yrs.	Total
\$465	\$429	\$510	\$547	\$527	\$508
\$977,307	\$880,113	\$7,532,342	\$4,215,463	\$1,750,238	\$16,068,116
175	171	1,231	642	277	2,635

10-14 yrs.	15-19 yrs.	20-24 yrs.	2013 25-29 yrs.	30 or more yrs.	Total
\$468	\$436	\$518	\$553	\$532	\$516
\$964,925	\$893,878	\$7,365,223	\$4,099,008	\$1,755,277	\$15,997,700
172	171	1,186	618	275	2,586

10-14 yrs.	15-19 yrs.	20-24 yrs.	2012 25-29 yrs.	30 or more yrs.	Total
\$468	\$449	\$533	\$558	\$536	\$523
\$989,289	\$948,587	\$7,617,692	\$4,041,300	\$1,698,972	\$16,114,277
176	176	1,192	604	264	2,566

10-14 yrs.	15-19 yrs.	20-24 yrs.	2011 25-29 yrs.	30 or more yrs.	Total
\$475	\$455	\$545	\$557	\$546	\$531
\$991,312	\$988,209	\$7,868,124	\$3,972,987	\$1,638,323	\$16,299,110
174	181	1,202	594	250	2,557

10-14 yrs.	15-19 yrs.	20-24 yrs.	2010 25-29 yrs.	30 or more yrs.	Total
\$481	\$460	\$548	\$557	\$540	\$533
\$1,038,333	\$987,831	\$7,695,267	\$3,823,520	\$1,516,304	\$15,913,804
180	179	1,170	572	234	2,489

10-14 yrs.	15-19 yrs.	20-24 yrs.	2009 25-29 yrs.	30 or more yrs.	Total
\$485	\$469	\$548	\$556	\$532	\$533
\$1,060,239	\$1,013,207	\$7,655,729	\$3,773,959	\$1,367,171	\$15,729,927
182	180	1,165	566	214	2,461

10-14 yrs.	15-19 yrs.	20-24 yrs.	2008 25-29 yrs.	30 or more yrs.	Total
\$493	\$471	\$551	\$559	\$527	\$535
\$1,047,356	\$982,995	\$7,565,509	\$3,682,116	\$1,283,509	\$15,405,460
177	174	1,145	549	203	2,400

10-14 yrs.	15-19 yrs.	20-24 yrs.	2007 25-29 yrs.	30 or more yrs.	Total
\$492	\$522	\$479	\$502		
\$1,012,913	\$998,782	\$6,675,988	\$3,437,413	\$1,185,193	\$13,970,631
175	181	1,080	549	206	2,319

**SCHEDULES OF AVERAGE BENEFIT PAYMENT AMOUNTS – OPEB PLANS\***

**GROUP I – TEACHERS**

	2016		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$254	\$237
Annual Benefits		\$54,925	\$11,368
Number of retired members		18	4
**Includes 13 members who did not have service reported.			
	2015		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$255	\$237
Annual Benefits		\$61,247	\$11,368
Number of retired members		20	4
**Includes 13 members who did not have service reported.			
	2014		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$298	\$283
Annual Benefits		\$42,954	\$10,191
Number of retired members		12	3
**Includes 10 members who did not have service reported.			
	2013		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$285	\$329
Annual Benefits		\$47,941	\$11,856
Number of retired members		14	3
**Includes 11 members who did not have service reported.			
	2012		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$286	\$306
Annual Benefits		\$37,741	\$7,349
Number of retired members		11	2
**Includes 8 members who did not have service reported.			
	2011		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$321	\$376
Annual Benefits		\$38,535	\$4,507
Number of retired members		10	1
**Includes 7 members who did not have service reported.			
	2010		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$332	\$376
Annual Benefits		\$27,890	\$4,507
Number of retired members		7	1
**Includes 7 members who did not have service reported.			
	2009		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$330	\$376
Annual Benefits		\$27,729	\$4,507
Number of retired members		7	1
**Includes 7 members who did not have service reported.			
	2008		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$336	\$376
Annual Benefits		\$28,218	\$4,507
Number of retired members		7	1
**Includes 7 members who did not have service reported.			
	2007		
	Service	0-4 yrs.**	5-9 yrs.
Average Monthly Benefit		\$300	\$348
Annual Benefits		\$28,759	\$4,173
Total Retirees		8	1
**Includes 8 members who did not have service reported.			

\*Data prior to fiscal year 2007 is not available. Data for future fiscal years will be added prospectively.

10-14 yrs.	15-19 yrs.	20-24 yrs.	2016 25-29 yrs.	30 or more yrs.	Total
\$331	\$0	\$371	\$379	\$436	\$408
\$15,875	\$0	\$4,391,882	\$4,213,344	\$12,467,121	\$21,253,515
4	0	987	947	2,381	4,141

10-14 yrs.	15-19 yrs.	20-24 yrs.	2015 25-29 yrs.	30 or more yrs.	Total
\$390	\$474	\$376	\$386	\$448	\$417
\$18,717	\$5,684	\$4,563,825	\$4,461,226	\$12,940,878	\$22,062,945
4	1	1,011	963	2,408	4,411

10-14 yrs.	15-19 yrs.	20-24 yrs.	2014 25-29 yrs.	30 or more yrs.	Total
\$566	\$474	\$391	\$401	\$470	\$436
\$20,382	\$5,684	\$4,652,955	\$4,566,115	\$13,586,048	\$22,884,329
3	1	992	949	2,411	4,371

10-14 yrs.	15-19 yrs.	20-24 yrs.	2013 25-29 yrs.	30 or more yrs.	Total
\$462	\$355	\$402	\$410	\$489	\$451
\$27,731	\$8,526	\$4,808,676	\$4,703,090	\$14,142,923	\$23,750,743
5	2	998	957	2,411	4,390

10-14 yrs.	15-19 yrs.	20-24 yrs.	2012 25-29 yrs.	30 or more yrs.	Total
\$484	\$474	\$415	\$421	\$505	\$466
\$23,224	\$5,684	\$5,028,708	\$4,888,880	\$14,831,920	\$24,823,506
4	1	1,009	968	2,446	4,441

10-14 yrs.	15-19 yrs.	20-24 yrs.	2011 25-29 yrs.	30 or more yrs.	Total
\$484	\$474	\$429	\$439	\$525	\$484
\$23,224	\$5,684	\$5,214,828	\$5,032,007	\$15,538,525	\$25,857,310
4	1	1,014	956	2,467	4,453

10-14 yrs.	15-19 yrs.	20-24 yrs.	2010 25-29 yrs.	30 or more yrs.	Total
\$566	\$474	\$438	\$449	\$532	\$492
\$20,382	\$11,368	\$5,334,533	\$5,139,796	\$15,865,603	\$26,404,079
3	2	1,016	954	2,487	4,470

10-14 yrs.	15-19 yrs.	20-24 yrs.	2009 25-29 yrs.	30 or more yrs.	Total
\$566	\$474	\$436	\$448	\$526	\$488
\$20,382	\$11,368	\$5,012,288	\$4,890,068	\$14,497,402	\$24,463,744
3	2	959	909	2,298	4,179

10-14 yrs.	15-19 yrs.	20-24 yrs.	2008 25-29 yrs.	30 or more yrs.	Total
\$484	\$474	\$420	\$438	\$513	\$474
\$23,224	\$11,368	\$4,291,716	\$4,272,401	\$12,376,720	\$21,008,154
4	2	851	813	2,012	3,690

10-14 yrs.	15-19 yrs.	20-24 yrs.	2007 25-29 yrs.	30 or more yrs.	Total
\$402	\$439	\$383	\$408	\$467	\$435
\$24,135	\$10,526	\$3,481,912	\$3,611,050	\$10,115,236	\$17,275,791
5	2	754	737	1,804	3,311



**SCHEDULES OF AVERAGE BENEFIT PAYMENT AMOUNTS – OPEB PLANS\***

**GROUP I – POLITICAL SUBDIVISION EMPLOYEES**

	Service	2016	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$254	\$220
Annual Benefits			\$48,768	\$26,377
Number of retired members			16	10
**Includes 6 members who did not have service reported.				
	Service	2015	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$272	\$220
Annual Benefits			\$52,132	\$26,435
Number of retired members			16	10
**Includes 6 members who did not have service reported.				
	Service	2014	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$310	\$341
Annual Benefits			\$52,132	\$28,644
Number of retired members			14	7
**Includes 6 members who did not have service reported.				
	Service	2013	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$299	\$342
Annual Benefits			\$57,378	\$41,047
Number of retired members			16	10
**Includes 6 members who did not have service reported.				
	Service	2012	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$322	\$341
Annual Benefits			\$65,652	\$32,763
Number of retired members			17	8
**Includes 7 members who did not have service reported.				
	Service	2011	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$330	\$348
Annual Benefits			\$67,317	\$41,814
Number of retired members			17	10
**Includes 8 members who did not have service reported.				
	Service	2010	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$367	\$338
Annual Benefits			\$65,985	\$44,665
Number of retired members			15	11
**Includes 8 members who did not have service reported.				
	Service	2009	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$364	\$350
Annual Benefits			\$65,541	\$46,198
Number of retired members			15	11
**Includes 7 members who did not have service reported.				
	Service	2008	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$327	\$373
Annual Benefits			\$62,810	\$49,275
Number of retired members			16	11
**Includes 9 members who did not have service reported.				
	Service	2007	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit			\$312	\$327
Annual Benefits			\$48,722	\$39,286
Total Retirees			13	10
**Includes 10 members who did not have service reported.				

\*Data prior to fiscal year 2007 is not available. Data for future fiscal years will be added prospectively.

10-14 yrs.	15-19 yrs.	20-24 yrs.	2016 25-29 yrs.	30 or more yrs.	Total
\$232	\$260	\$352	\$356	\$418	\$366
\$33,427	\$18,717	\$2,493,561	\$1,225,483	\$1,590,475	\$5,436,808
12	6	590	287	317	1,238

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2015 25-29 yrs.	30 or more yrs.	Total
\$259	\$260	\$354	\$359	\$426	\$370
\$40,461	\$18,717	\$2,581,495	\$1,262,906	\$1,667,570	\$5,649,716
13	6	608	293	326	1,272

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2014 25-29 yrs.	30 or more yrs.	Total
\$362	\$390	\$383	\$375	\$440	\$396
\$43,404	\$18,717	\$2,813,725	\$1,383,078	\$1,896,501	\$6,236,201
10	4	612	307	359	1,313

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2013 25-29 yrs.	30 or more yrs.	Total
\$419	\$390	\$395	\$389	\$455	\$409
\$60,359	\$18,717	\$2,965,642	\$1,446,483	\$2,000,382	\$6,590,008
12	4	626	310	366	1,344

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2012 25-29 yrs.	30 or more yrs.	Total
\$382	\$359	\$403	\$398	\$469	\$419
\$59,623	\$21,559	\$3,137,104	\$1,534,994	\$2,196,314	\$7,048,009
13	5	649	321	390	1,403

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2011 25-29 yrs.	30 or more yrs.	Total
\$404	\$390	\$415	\$416	\$493	\$435
\$58,229	\$18,717	\$3,257,086	\$1,655,639	\$2,314,398	\$7,413,200
12	4	654	332	391	1,420

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2010 25-29 yrs.	30 or more yrs.	Total
\$424	\$373	\$428	\$424	\$502	\$446
\$60,991	\$17,881	\$3,406,946	\$1,689,244	\$2,404,823	\$7,690,535
12	4	663	332	399	1,436

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2009 25-29 yrs.	30 or more yrs.	Total
\$447	\$390	\$428	\$417	\$505	\$444
\$75,081	\$18,717	\$3,179,812	\$1,515,015	\$2,029,561	\$6,929,925
14	4	619	303	335	1,301

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2008 25-29 yrs.	30 or more yrs.	Total
\$472	\$390	\$423	\$416	\$512	\$443
\$73,661	\$18,717	\$2,789,673	\$1,334,025	\$1,879,964	\$6,208,125
13	4	550	267	306	1,167

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10-14 yrs.	15-19 yrs.	20-24 yrs.	2007 25-29 yrs.	30 or more yrs.	Total
\$462	\$358	\$396	\$375	\$459	\$408
\$83,195	\$21,504	\$2,107,362	\$1,094,540	\$1,492,664	\$4,887,273
15	5	442	243	271	999

**SCHEDULES OF AVERAGE BENEFIT PAYMENT AMOUNTS – OPEB PLANS\***

**GROUP I – STATE EMPLOYEES**

	2016		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$394	\$416
Annual Benefits		\$382,544	\$334,814
Number of retired members		81	67
**Includes 5 members who did not have service reported.			
	2015		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$408	\$410
Annual Benefits		\$401,058	\$344,263
Number of retired members		82	70
**Includes 5 members who did not have service reported.			
	2014		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$439	\$439
Annual Benefits		\$416,243	\$353,356
Number of retired members		79	67
**Includes 3 members who did not have service reported.			
	2013		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$458	\$440
Annual Benefits		\$428,585	\$369,538
Number of retired members		78	70
**Includes 4 members who did not have service reported.			
	2012		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$401	\$444
Annual Benefits		\$649,228	\$367,976
Number of retired members		135	69
**Includes 60 members who did not have service reported.			
	2011		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$408	\$455
Annual Benefits		\$724,932	\$382,467
Number of retired members		148	70
**Includes 76 members who did not have service reported.			
	2010		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$411	\$483
Annual Benefits		\$789,405	\$405,955
Number of retired members		160	70
**Includes 76 members who did not have service reported.			
	2009		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$410	\$497
Annual Benefits		\$842,110	\$411,185
Number of retired members		171	69
**Includes 86 members who did not have service reported.			
	2008		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$405	\$499
Annual Benefits		\$889,207	\$419,431
Number of retired members		183	70
**Includes 99 members who did not have service reported.			
	2007		
	Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit		\$373	\$499
Annual Benefits		\$838,008	\$455,030
Total Retirees		187	76
**Includes 115 members who did not have service reported.			

\*Data prior to fiscal year 2007 is not available. Data for future fiscal years will be added prospectively.

10-14 yrs.	15-19 yrs.	20-24 yrs.	2016 25-29 yrs.	30 or more yrs.	Total
\$370	\$377	\$336	\$364	\$369	\$362
\$324,159	\$185,304	\$1,945,584	\$1,441,9747	\$3,189,632	\$7,804,011
73	41	483	330	721	1,796
10-14 yrs.	15-19 yrs.	20-24 yrs.	2015 25-29 yrs.	30 or more yrs.	Total
\$384	\$396	\$343	\$367	\$371	\$367
\$345,515	\$194,804	\$2,086,895	\$1,500,527	\$3,329,873	\$8,202,936
75	41	507	341	748	1,864
10-14 yrs.	15-19 yrs.	20-24 yrs.	2014 25-29 yrs.	30 or more yrs.	Total
\$397	\$405	\$351	\$366	\$373	\$373
\$385,589	\$199,311	\$2,211,341	\$1,555,990	\$3,478,906	\$8,600,736
81	41	525	354	777	1,924
10-14 yrs.	15-19 yrs.	20-24 yrs.	2013 25-29 yrs.	30 or more yrs.	Total
\$408	\$404	\$353	\$369	\$384	\$379
\$435,853	\$203,412	\$2,213,280	\$1,575,687	\$3,624,803	\$8,851,158
89	42	522	356	787	1,944
10-14 yrs.	15-19 yrs.	20-24 yrs.	2012 25-29 yrs.	30 or more yrs.	Total
\$419	\$398	\$360	\$369	\$395	\$384
\$437,722	\$205,609	\$2,349,911	\$1,642,715	\$3,805,681	\$9,458,842
87	43	544	371	802	2,051
10-14 yrs.	15-19 yrs.	20-24 yrs.	2011 25-29 yrs.	30 or more yrs.	Total
\$432	\$405	\$370	\$378	\$403	\$393
\$482,302	\$208,938	\$2,503,738	\$1,772,785	\$4,052,072	\$10,127,234
93	43	564	391	838	2,147
10-14 yrs.	15-19 yrs.	20-24 yrs.	2010 25-29 yrs.	30 or more yrs.	Total
\$432	\$412	\$376	\$381	\$412	\$400
\$487,783	\$212,754	\$2,559,991	\$1,858,335	\$4,238,332	\$10,552,555
94	43	567	406	857	2,197
10-14 yrs.	15-19 yrs.	20-24 yrs.	2009 25-29 yrs.	30 or more yrs.	Total
\$436	\$406	\$384	\$384	\$420	\$406
\$497,284	\$214,419	\$2,678,358	\$1,952,886	\$4,460,274	\$11,056,516
95	44	581	424	884	2,268
10-14 yrs.	15-19 yrs.	20-24 yrs.	2008 25-29 yrs.	30 or more yrs.	Total
\$437	\$414	\$392	\$399	\$427	\$413
\$509,140	\$223,432	\$2,815,199	\$2,051,632	\$4,628,374	\$11,536,415
97	45	599	429	904	2,327
10-14 yrs.	15-19 yrs.	20-24 yrs.	2007 25-29 yrs.	30 or more yrs.	Total
\$409	\$424	\$334	\$375	\$406	\$393
\$456,490	\$274,872	\$2,535,540	\$1,965,753	\$4,669,153	\$11,194,846
93	54	570	437	958	2,375

**PRINCIPAL PARTICIPATING EMPLOYERS**

**PRINCIPAL PARTICIPATING EMPLOYERS – PENSION PLAN  
CURRENT YEAR AND NINE YEARS AGO**

	As Of June 30, 2016			As Of June 30, 2007		
	# of Covered	Rank	Percentage of Total	# of Covered	Rank	Percentage of Total
<b>Participating Government</b>	<b>Employees</b>	<b>Rank</b>	<b>Pension Plan</b>	<b>Employees</b>	<b>Rank</b>	<b>Pension Plan</b>
State of New Hampshire	10,747	1	22.36%	12,165	1	23.95%
SAU 42 (Nashua School District)	1,271	2	2.64%	1,297	3	2.55%
Manchester School District	1,263	3	2.63%	1,463	2	2.88%
Timberlane School District	651	4	1.35%	662	4	1.30%
City of Dover	621	5	1.29%	—	—	—
Merrimack School District	610	6	1.27%	654	5	1.29%
City of Nashua	604	7	1.26%	569	9	1.12%
Concord School District	575	8	1.20%	615	6	1.21%
SAU 54 (Rochester School District)	569	9	1.18%	583	8	1.15%
Londonderry School District	536	10	1.12%	610	7	1.20%
All Other*	30,622		63.70%	32,184		63.35%
<b>Total (471 Governments)</b>	<b>48,069</b>		<b>100.00%</b>	<b>50,802</b>		<b>100.00%</b>

\*As of June 30, 2016, "All Other" consisted of:

Type	Number	Employees
City Governments	11	2,372
Town Governments & Related Entities	242	5,453
County Governments & Related Entities	12	3,215
School Districts & School Administrative Units	196	19,582
<b>Total</b>	<b>461</b>	<b>30,622</b>

A full list of participating employers as of June 30, 2016 begins on page 129.

**PRINCIPAL PARTICIPATING EMPLOYERS – GROUP II POLICE OFFICERS AND FIREFIGHTERS OPEB PLAN  
CURRENT YEAR AND NINE YEARS AGO**

	As Of June 30, 2016			As Of June 30, 2008**		
	# of Covered	Rank	Percentage of Total	# of Covered	Rank	Percentage of Total
<b>Participating Government</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>
State of New Hampshire	795	1	28.55%	620	1	25.83%
City of Manchester	298	2	10.70%	310	2	12.92%
City of Nashua	253	3	9.08%	221	3	9.21%
City of Concord	112	4	4.02%	118	4	4.92%
Town of Salem	109	5	3.91%	98	5	4.08%
City of Portsmouth	81	6	2.91%	80	6	3.33%
City of Dover	81	6	2.91%	61	7	2.54%
Town of Derry	63	7	2.26%	48	9	2.00%
City of Keene	62	8	2.23%	50	8	2.08%
Town of Hampton	56	9	2.01%	48	9	2.00%
All Other*	875		31.42%	746		31.09%
<b>Total (145 Governments)</b>	<b>2,785</b>		<b>100.00%</b>	<b>2,400</b>		<b>100.00%</b>

\*As of June 30, 2016, "All Other" consisted of:

Type	Number	Employees
City Governments	7	200
Town Governments & Related Entities	116	559
County Governments & Related Entities	10	116
<b>Total</b>	<b>133</b>	<b>875</b>

\*\*Data for nine years ago is not available due to changes in accounting systems. Data for June 30, 2008 will be reported prospectively until such time as data is available for nine years ago.

**PRINCIPAL PARTICIPATING EMPLOYERS — GROUP I TEACHERS  
OPEB PLAN CURRENT YEAR AND NINE YEARS AGO**

	As Of June 30, 2016			As Of June 30, 2008**		
	# of Covered		Percentage of Total	# of Covered		Percentage of Total
<b>Participating Government</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>
Manchester School District	481	1	11.08%	464	1	12.57%
SAU 42 (Nashua School District)	389	2	8.96%	304	2	8.24%
Concord School District	184	3	4.24%	181	3	4.91%
Keene School District	159	4	3.66%	147	4	3.98%
Portsmouth School District	139	5	3.20%	142	5	3.85%
Salem School District	116	6	2.67%	90	6	2.44%
Dover School District	100	7	2.30%	85	7	2.30%
Merrimack School District	97	8	2.23%	—	—	—
SAU 54 (Rochester School District)	95	9	2.19%	73	9	1.98%
SAU 10 (Derry Coop School District)	82	10	1.89%	—	—	—
All Other*	2,499		57.58%	2,204		59.73%
<b>Total (165 Governments)</b>	<b>4,341</b>		<b>100.00%</b>	<b>3,690</b>		<b>100.00%</b>

\*As of June 30, 2016, "All Other" consisted of:

<b>Type</b>	<b>Number</b>	<b>Employees</b>
School Districts & School Administrative Units	155	2,499
<b>Total</b>	<b>155</b>	<b>2,499</b>

\*\*Data for nine years ago is not available due to changes in accounting systems. Data for June 30, 2008 will be reported prospectively until such time as data is available for nine years ago.

**PRINCIPAL PARTICIPATING EMPLOYERS — GROUP I POLITICAL SUBDIVISION EMPLOYEES  
OPEB PLAN CURRENT YEAR AND NINE YEARS AGO**

	As Of June 30, 2016			As Of June 30, 2008**		
	# of Covered		Percentage of Total	# of Covered		Percentage of Total
<b>Participating Government</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>
City of Concord	70	1	5.65%	71	1	6.08%
City of Nashua	44	2	3.55%	37	2	3.17%
Hillsborough County	44	2	3.55%	36	3	3.08%
Rockingham County	35	3	2.83%	27	5	2.31%
City of Portsmouth	33	4	2.67%	26	6	2.23%
Concord School District	32	5	2.58%	28	4	2.40%
City of Keene	29	6	2.34%	—	—	—
Merrimack County	29	6	2.34%	27	5	2.31%
City of Dover	29	6	2.34%	26	6	2.23%
Grafton County	28	7	2.26%	—	—	—
All Other*	865		69.89%	889		73.79%
<b>Total (207 Governments)</b>	<b>1,238</b>		<b>100.00%</b>	<b>1,167</b>		<b>100.00%</b>

\*As of June 30, 2016, "All Other" consisted of:

<b>Type</b>	<b>Number</b>	<b>Employees</b>
City Governments	7	73
Town Governments & Related Entities	65	219
County Governments & Related Entities	8	54
School Districts & School Administrative Units	117	519
<b>Total</b>	<b>197</b>	<b>865</b>

\*\*Data for nine years ago is not available due to changes in accounting systems. Data for June 30, 2008 will be reported prospectively until such time as data is available for nine years ago.

**PRINCIPAL PARTICIPATING EMPLOYERS – GROUP I STATE EMPLOYEES  
OPEB PLAN CURRENT YEAR AND NINE YEARS AGO**

	As Of June 30, 2016			As Of June 30, 2008**		
	# of Covered	Percentage of Total		# of Covered	Percentage of Total	
<b>Participating Government</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>	<b>Employees</b>	<b>Rank</b>	<b>OPEB Plan</b>
State of New Hampshire	1,690	1	94.10%	2,320	1	99.70%
Community College System of New Hampshire	101	2	5.62%	—	—	—
New Hampshire Retirement System	5	3	0.28%	7	2	0.30%
<b>Total (6 Governments)</b>	<b>1,796</b>		<b>100.00%</b>	<b>2,327</b>		<b>100.00%</b>

\*\*Data for nine years ago is not available due to changes in accounting systems. Data for June 30, 2008 will be reported prospectively until such time as data is available for nine years ago.

## LISTING OF PARTICIPATING EMPLOYERS

### STATE GOVERNMENT

State of New Hampshire E, P, F  
 Community College System of  
 New Hampshire E  
 Community Development Finance  
 Authority E  
 Land & Community Heritage  
 Investment Program E  
 New Hampshire Retirement System E  
 Pease Development Authority E

### CITIES AND TOWNS (AND RELATED ENTITIES)

Albany E  
 Alexandria E, P  
 Allentown E, P, F  
 Allentown Sewer Commission E  
 Alstead P  
 Alton E, P, F  
 Amherst P, F  
 Andover P  
 Androscoggin Valley Regional Refuse  
 Disposal Dist. E  
 Antrim E, P  
 Ashland E, P  
 Ashland Electric Department E  
 Atkinson E, P  
 Auburn E, P, F  
 Baker Free Library E  
 Barnstead E, P, F  
 Barrington E, P, F  
 Bartlett P, F  
 BCEP Solid Waste District E  
 Bedford E, P, F  
 Belmont E, P, F  
 Bennington E, P  
 Berlin E, P, F  
 Berlin Housing Authority E  
 Berlin Water Works E  
 Bethlehem E, P, F  
 Boscawen E, P  
 Bow E, P, F  
 Bradford P

Brentwood E, P, F  
 Bristol E, P, F  
 Brookline E, P, F  
 Brookline Public Library E  
 Campton E, P  
 Campton-Thornton Fire  
 Department E, F  
 Canaan E, P  
 Candia P  
 Canterbury E, P, F  
 Carroll E, P, F  
 Center Harbor P  
 Central Hooksett Water Precinct E  
 Charlestown E, P  
 Chester E, P, F  
 Chesterfield E, P  
 Chichester E, P  
 Claremont E, P, F  
 Clarksville E  
 Colebrook E, P  
 Concord E, P, F  
 Concord Regional Solid Waste  
 Resource Recovery Facility E  
 Conway E, P  
 Conway Village Fire District E, F  
 Cornish E  
 Danville P  
 Deerfield E, P  
 Deering P  
 Derry E, P, F  
 Derry Housing Authority E  
 Dorchester E  
 Dover E, T, P, F  
 Dover Housing Authority E  
 Dublin E, P  
 Dunbarton E, P  
 Durham E, P, F  
 East Kingston E, P, F  
 Effingham P  
 Edelweiss Village District E  
 Enfield E, P  
 Epping E, P, F

Epsom E, P, F  
 Exeter E, P, F  
 Farmington P, F  
 Fitzwilliam E, P  
 Francestown E, P  
 Franconia P  
 Franklin E, P, F  
 Freedom P, F  
 Fremont P  
 Gilford E, P, F  
 Gilmanton E, P, F  
 Goffstown E, P, F  
 Goffstown Village Water Precinct E  
 Gorham E, P, F  
 Goshen E, P  
 Grafton E, P  
 Grantham E, P  
 Greenfield E, P  
 Greenland E, P  
 Greenville E, P  
 Groton E, P  
 Hampstead E, P, F  
 Hampton E, P, F  
 Hampton Falls E, P, F  
 Hancock P  
 Hanover E, P, F  
 Harrisville P  
 Haverhill E, P  
 Hebron E, P  
 Henniker E, P, F  
 Hillsborough P, F  
 Hinsdale E, P  
 Holderness E, P, F  
 Hollis E, P, F  
 Hooksett E, P, F  
 Hooksett Public Library E  
 Hooksett Sewer Commission E  
 Hooksett Village Water Precinct E  
 Hopkinton E, P, F  
 Hudson E, P, F  
 Jackson E, P, F



Jaffrey E, P, F	Mont Vernon E, P	Plaistow Public Library E
Jefferson E	Moultonborough E, P, F	Plymouth E, P, F
Keene E, P, F	Nashua E, P, F	Plymouth Village Water & Sewer E
Kensington P	Nashua Airport Authority E	Portsmouth E, P, F
Kingston E, F, P	Nashua Housing Authority E	Portsmouth Housing Authority E
Laconia E, P, F	Nelson E	Raymond E, P, F
Laconia Housing & Redevelopment E	New Boston P	Rindge E, P, F
Laconia Water Works E	New Castle E, P, F	Rochester E, P, F
Lakes Region Mutual Fire Aid E, F	New Durham E, P	Rockingham Planning Commission E
Lakes Region Planning Commission E	New England Interstate Water Pollution Control Commission E	Rollinsford P
Lancaster E, P, F	New Hampton E, P, F	Rumney E, P
Langdon P	New Ipswich E, P	Rye E, P, F
Lebanon E, P, F	New London E, P, F	Rye Water District E
Lee E, P, F	New London-Springfield Water Precinct E	Salem E, P, F
Lempster E, P	Newbury P	Salem Housing Authority E
Lincoln E, P	Newfields E, P	Salisbury E
Lisbon P	Newington E, P, F	Sanbornton E, P, F
Litchfield E, P, F	Newmarket E, P, F	Sanbornton Public Library E
Littleton E, P, F	Newport E, P, F	Sandown E, P, F
Littleton Public Library E	Newton E, P	Sandown Public Library E
Littleton Water & Light Department E	New Hampshire Municipal Bond Bank E	Sandwich P
Londonderry E, P, F	North Conway Water Precinct/ Fire Department E, F	Seabrook P, F
Loudon E, P, F	North Hampton E, P, F	Shelburne E
Lyme E, P	Northfield E, P	Somersworth E, P, F
Lyndeborough P	Northumberland E, P	Somersworth Housing Authority E
Madison E, P	Northwood E, P, F	South Hampton P
Manchester P, F	Nottingham P, F	Southern NH Planning Commission E
Marlborough E, P	Orford E, P	Springfield E, P
Marlow E	Ossipee E, P	Stark E
Mason P	Pelham E, P, F	Stewartstown E, P
Maxfield Public Library E	Pembroke E, P	Strafford P, F
Meredith E, P, F	Penacook-Boscawen Water Precinct E	Stratford E
Meriden Village Water District E	Peterborough E, P, F	Stratham E, P
Merrimack E, P, F	Piermont P	Sugar Hill E, P
Merrimack Village District E	Pittsburg E, P	Sunapee E, P
Middleton P	Pittsfield E, P, F	Sutton P
Milford E, P, F	Plainfield E, P	Swanzey P, F
Milford Area Communication Center E	Plaistow E, P, F	SWNH District Fire Mutual Aid E, F
Milton E, F, P		Tamworth E, P, F
Monroe E		Thornton E, P
		Tilton E, P

Tilton/Northfield Fire District E, F  
 Troy E, P  
 Troy Water & Sewer E  
 Tuffonboro E, P, F  
 Unity E  
 Village District of Eastman E  
 Wakefield E, P, F  
 Walpole E, P  
 Warner E, P  
 Warner Village Water District E  
 Washington E, P  
 Waterville Estates Village District E  
 Waterville Valley E, P, F  
 Weare E, P  
 Webster E, P  
 Weeks Public Library E  
 Westmoreland E  
 Whitefield E, P, F  
 Wilmot E, P  
 Wilton P  
 Winchester E, P  
 Windham E, P, F  
 Wolfeboro E, P, F  
 Woodstock E, P  
 Woodsville Fire District E  
 Woodsville Water & Light  
 Department E

#### COUNTY GOVERNMENTS (AND RELATED ENTITIES)

Belknap County E, P  
 Belknap County Conservation  
 District E  
 Carroll County E, P  
 Cheshire County E, P  
 Coos County E, P  
 Coos County Nursing Home E  
 Grafton County E, P  
 Hillsborough County E, P  
 Merrimack County E, P  
 Rockingham County E, P, F

Strafford County E, P  
 Sullivan County E, P

#### SCHOOL DISTRICTS

Allenstown School District T  
 Alton School District E, T  
 Amherst School District E, T  
 Andover School District E, T  
 Ashland School District E, T  
 Auburn School District E, T  
 Barnstead School District E, T  
 Barrington School District E, T  
 Bartlett School District E, T  
 Bath School District E, T  
 Bedford School District E, T  
 Bethlehem School District E, T  
 Bow School District E, T  
 Brentwood School District E, T  
 Brookline School District E, T  
 Campton School District E, T  
 Candia School District E, T  
 Chester School District E, T  
 Chesterfield School District E, T  
 Chichester School District E, T  
 Claremont School District E, T  
 Cocheco Arts & Technology  
 Academy T  
 Colebrook School District T  
 Concord School District E, T  
 Contoocook Valley Regional  
 School District-SAU 1 E, T  
 Conway School District E, T  
 Cornish School District E, T  
 Croydon School District T  
 Deerfield School District T  
 Dresden School District E, T  
 Dunbarton School District T  
 East Kingston School District E, T  
 Epping School District E, T  
 Epsom School District T  
 Errol School District T  
 Exeter School District E, T

Exeter Regional Co-Op School  
 District E, T  
 Fall Mountain Regional School  
 District E, T  
 Farmington School District E, T  
 Franklin School District E, T  
 Freedom School District E, T  
 Fremont School District E, T  
 Gilford School District E, T  
 Gilmanton School District E, T  
 Goffstown School District E, T  
 Goshen-Lempster School  
 District E, T  
 Governor Wentworth Regional  
 School District E, T  
 Grantham School District E, T  
 Great Bay eLearning Charter  
 School T  
 Greenland School District E, T  
 GRS Cooperative School  
 District E, T  
 Hampstead School District E, T  
 Hampton Falls School  
 District E, T  
 Hampton School District E, T  
 Hanover School District E, T  
 Harrisville School District E, T  
 Haverhill Coop School  
 District E, T  
 Henniker School District E, T  
 Hill School District E, T  
 Hillsboro-Deering School District E, T  
 Hinsdale School District E, T  
 Holderness School District E, T  
 Hollis School District E, T  
 Hollis/Brookline Coop School  
 District E, T  
 Hooksett School District E, T  
 Hopkinton School District E, T  
 Hudson School District E, T  
 Inter-Lakes Cooperative  
 School District E, T  
 Jackson School District E, T  
 Jaffrey-Rindge Co-op E, T

John Stark Regional School District E, T	Newington School District E, T	Stoddard School District E, T
Kearsarge Regional Cooperative School District E, T	Newmarket School District E, T	Strafford School District E, T
Keene School District E, T	Newport School District E, T	Stratford School District E, T
Kensington School District E, T	Next Charter School T	Stratham School District E, T
Laconia School District E, T	North Country Charter Academy T	Sunapee School District E, T
Lafayette Regional Cooperative School District E, T	North Country Education Service E, T	Tamworth School District E, T
Landaff School District T	North Hampton School District E, T	Thornton School District E, T
Lebanon School District E, T	Northumberland School District E, T	Timberlane Regional School District E, T
Lempster School District E, T	Northwood School District E, T	Unity School District E, T
Lincoln Woodstock Coop School District E, T	Nottingham School District E, T	Virtual Learning Academy Charter School T
Lisbon Regional School District E, T	Oyster River Coop School District E, T	Wakefield School District E, T
Litchfield School District E, T	Pelham School District E, T	Warren School District E, T
Littleton School District E, T	Pembroke School District E, T	Washington School District E, T
Londonderry School District E, T	Pemi-Baker Regional School District E, T	Waterville Valley School District E, T
Lyme School District E, T	Piermont School District E, T	Weare School District T
Madison School District E, T	Pittsburg School District E, T	Wentworth School District E, T
Manchester School District E, T	Pittsfield School District E, T	Westmoreland School District E, T
Marlborough School District E, T	Plainfield School District E, T	White Mountains Regional School District E, T
Marlow School District E, T	Plymouth School District E, T	Wilton-Lyndeborough School District E, T
Mascenic Regional School District E, T	Portsmouth School District — SAU 52 E, T	Winchester School District E, T
Mascoma Valley Regional School District E, T	Portsmouth—Josie F. Prescott E	Windham School District E, T
Mason School District E, T	Profile Coop School District E, T	Winnacunnet Coop School District E, T
Merrimack School District E, T	Propsect Mountain High School E, T	Winnisquam Regional Coop School District E, T
Merrimack Valley School District E, T	Raymond School District E, T	
Milan School District E, T	Rivendell Interstate School District E, T	
Milford School District E, T	Rollinsford School District E, T	
Milton School District E, T	Rumney School District E, T	
Monadnock Regional School District E, T	Rye School District E, T	
Monroe School District E, T	Salem School District E, T	SAU 2 E, T
Mont Vernon School District E, T	Sanborn Regional School District E, T	SAU 3 E, T
Moultonborough School District E, T	Seabrook School District E, T	SAU 6 E
Nelson School District T	Seacoast Charter School T	SAU 7 E, T
New Boston School District E, T	Shaker Regional School District E, T	SAU 9 E, T
New Castle School District E, T	Somersworth School District E, T	SAU 10 E, T
Newfields School District E, T	Souhegan Cooperative School District E, T	SAU 13 E, T
Newfound Area School District E, T	South Hampton School District E, T	SAU 15 E, T
	Stark School District E, T	SAU 16 E, T
	Stewartstown School District T	SAU 18 E, T
		SAU 19 E, T
		SAU 20 E

**SCHOOL ADMINISTRATIVE UNITS**

SAU 21 E, T  
SAU 23 E, T  
SAU 24 E, T  
SAU 29 E, T  
SAU 34 E, T  
SAU 35 E, T  
SAU 39 E  
SAU 41 E  
SAU 42 E, T  
SAU 43 E, T  
SAU 44 E, T  
SAU 46 E  
SAU 48 E, T  
SAU 50 E, T  
SAU 53 E, T  
SAU 54 E, T  
SAU 55 E  
SAU 56 E, T  
SAU 58 E  
SAU 61 E  
SAU 64 E, T  
SAU 67 E, T  
SAU 70 E, T  
SAU 71 E, T

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