









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

Comprehensive Annual Financial Report For The Fiscal Year Ended

NHRS Celebrates 50 Years! 5 NHRS Committed to providing secure retirement benefits and superior service for five decades.

superior service for five decades.



NEW HAMPSHIRE RETIREMENT SYSTEM

INTRODUCTORY SECTION

Cover Design and Layout: Christine Basha, NHRS Public Information Office Board and Staff Photos: Bogacz Photography/Digital Media, Concord, NH 603.228.1229 Design and Layout: Debbie K Graphics, Hillsborough, NH 603.344.9812

COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2017

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



Hersh Sosnoff In Memoriam Trustee 2011-2017

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LETTER FROM THE CHAIR



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



Richard A. Gustafson, PhD Chair Board of Trustees

December 12, 2017

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, 2017. This report describes the financial conditions of both the Pension Plan and the Other Post Employment Benefit (OPEB) Plan. The report also describes various changes that occurred during Fiscal Year 2017.

This year, NHRS marked its 50th anniversary, and throughout this report readers will see images of current and former members. Governor Christopher Sununu in July commended NHRS for providing "stable, secure pension benefits to those who serve the citizens of New Hampshire."

NHRS realized a 13.5% return on investments in the fiscal year ended June 30, 2017, exceeding the retirement system's assumed rate of investment return of 7.25%. It is important to note that these investment returns are for a single year, and need to be considered within the context of the portfolio's performance over time as compared to the assumed rate of re-

turn. The three-year, five-year, 10-year, 20-year, and 25-year returns for the periods ended June 30, 2017, were 5.8%, 9.8%, 5.7%, 6.8%, 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 Net Universe, which represents 283 public plans totaling more than \$599 billion in assets, NHRS performed better than 90% of its peers over the three and five-year periods and better than 80% of its peers over the one-, 10-, 20-, and 25-year periods. In addition, NHRS' investment and administrative expenses remain 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 the assumed rate of investment return; approves an investment policy, including asset allocation; and selects an investment consultant to advise the Independent Investment Committee (IIC). The IIC 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 2017, issued separately by the IIC.

At June 30, 2017, the funded ratio of the Pension Plan stood at 61.8% and the OPEB Plan at 5.6%, versus 60.0% and 3.7% 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 plan provides a post-employment medical subsidy benefit to qualified Group I and Group II members. Because the OPEB plan is closed to new members and, as required by statute, is essentially funded on a pay-as-you-go basis, it does 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 \$8.29 billion, an increase of approximately \$832 million over the prior fiscal year, and an all-time high for the plan. The increase is mainly the result of positive investment performance.

In addition to actuarial funding data noted above, the CAFR also includes financial accounting information required under Governmental Accounting Standards Board (GASB) statement No. 67, which deals with financial reporting for pension plans, and GASB statement 74, which deals with financial reporting of OPEB plans, i.e. the Medical Subsidy. 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.

The Board of Trustees has a fiduciary responsibility to ensure that the interests of members and beneficiaries are properly safeguarded over the long term. This responsibility is embodied in the law and supported by New Hampshire Constitution (Part I, Article 36-a), which protects trust fund assets for the exclusive purpose of providing benefits, requires Trustees to set actuarially sound employer contribution rates, and requires employers to annually pay those rates in full.

In the past decade, a number of legislative and policy changes have put NHRS on a path to financial health, including a closed 30-year amortization period for the retirement system's unfunded actuarial accrued liability (UAAL) through 2039. This year, a statutorily created Decennial Commission charged to make recommendations to ensure the long-term viability of the retirement system met throughout the fall to review the status of the plan. This 17-member commission will issue its report by the end of the calendar year.

Through a number of recent and ongoing initiatives, NHRS has continued to strengthen its operations, efficiency, and stakeholder outreach. These efforts include expanded employer education efforts, targeted outreach to new members, and ongoing cyber-security efforts, including authentication enhancements to My Account, the retirement system's online member and retiree portal. In addition, NHRS revised and refined its Mission, Vision, and Values statement to be more concise, memorable and forward-focused - "To provide secure retirement benefits and superior service."

This year, Board and staff mourned the passing of Trustee Herschel Sosnoff, who died July 1, 2017, after a long illness. Trustee Sosnoff had served on the Board since November 2011, and was also a member of the Independent Investment Committee since January 2012.

In other board transitions, Stephen Marro joined the Board in January as the county employer representative, and John Beardmore resigned in October as the state employer representative.

Another noteworthy transition was the retirement of former state Sen. Harold Janeway as the Chair of the IIC, a position he held since the committee was created in 2009. Also a former Trustee, Sen. Janeway chaired the investments subcommittee of the 2007 retirement commission that developed the initial recommendation to create the IIC, and as a state senator, he shepherded the bill through the legislative process. Trustee Maureen Kelliher, who has served on the IIC since June, 2014, was elected to chair the committee.

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. Our primary areas of focus moving forward are improving the funded ratio of the pension trust, generating investment returns at or above the actuarially assumed rate, and continuously working to improve the efficiency of our processes. 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



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

BOARD OF TRUSTEES



J. David McCrillis
Public Member
August 2012 to July 2018



Maureen Kelliher Public Member June 2014 to July 2017



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



Michael R. Milligan Employer Member November 2017 to July 2018



Vacant

Public Member

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



Stephen Marro Employer Member December 2016 to July 2019

INDEPENDENT INVESTMENT COMMITTEE

INDEPENDENT MEMBERS



Keith Quinton April 2017-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, Chair June 2014-Present



Hershel Sosnoff January 2012-June 2017 In Memoriam

CERTIFICATE OF ACHIEVEMENT



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

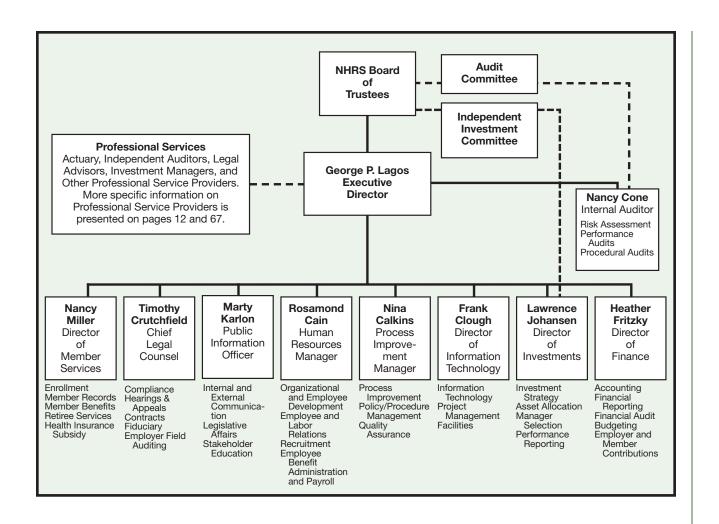
New Hampshire Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2016

Executive Director/CEO

ADMINISTRATIVE ORGANIZATION



NHRS MANAGEMENT TEAM



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

Professional Managers, **ADVISORS AND** SERVICE PROVIDERS

DOMESTIC EQUITY MANAGERS

AB

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,

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 Segall, Bryant and Hamill Walter Scott & Partners Limited Wellington Trust Company, N.A.

FIXED INCOME MANAGERS

Brandywine Global Investment Management, LLC

DoubleLine Capital

GAM

Income Research & Management Loomis Sayles & Company, L.P.

Manulife Asset Management

PRIVATE DEBT & EQUITY MANAGERS

Actis Alcentra Apax Partners

Apollo Global Management 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

Thoma Bravo

Top Tier Capital Partners

VSS

Warburg Pincus

REAL ESTATE MANAGERS

The Townsend Group

TRANSITION MANAGERS

Abel/Noser, LLC

BlackRock Institutional Trust

Company, N.A.

Pavillion Global Markets

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, LLC

LETTER OF TRANSMITTAL



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



George P. Lagos Executive Director

December 12, 2017

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, 2017. 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 Plan.

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, early and vested 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 47,886 active members and 35,694 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 a post-employment medical plan (OPEB Plan) for qualified Group I and Group II members.

BUDGET CONTROLS AND NHRS ADMINISTRATION

The administrative budget for fiscal year 2017 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, 2017, plan net position increased \$832.3 million to \$8,293.3 billion compared to a \$69.1 million net position decrease for the prior year. Positive investment returns for the five years ended June 30, 2017, contributed to a modest improvement 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, 2017, based on the June 30, 2017 actuarial valuation was 61.8%. The comparable funded ratio at June 30, 2016, based on the June 30, 2016 interim actuarial valuation was 60.0%. The funded ratio of the OPEB Plan at June 30, 2017, based on the June 30, 2017 actuarial valuation, was 5.6%. The comparable funded ratio at June 30, 2016, based on the June 30, 2016 interim actuarial valuation was 3.7%. The ratio of Plan net position to the Plan liability under GAAP is separately determined for both the Pension and OPEB plan and is discussed in the financial statements. A comprehensive analysis of funding progress for the Plans is provided in the Required Supplementary Information beginning on page 48.

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/about-nhrs/policies.

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 granting 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, 2017, were 13.5%, 5.8%, 9.8%, 5.7%, and 6.8%, respectively. A discussion about comparative annualized returns and related benchmark indices for fiscal years 2017 and 2016 is presented in the Management's Discussion and Analysis beginning on page 21.

For the five, six, seven and eight years ending June 30, 2017, a period during which the Independent Investment Committee made the investment decisions, total fund performance was in the top decile.

The outperformance of 150 bps relative to the median of the InvestorForce Public Defined Benefit Net Universe for the eight years ending June 30, 2017 represents approximately \$508 million.

The underperformance of 60 bps relative to the median of the same index for the eight years ending June 30, 2009 represents approximately \$198 million.

MAJOR INITIATIVES

NHRS faces many 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 2017 were:

- Achieved investment performance for FY 2017 of 13.5% which placed NHRS in the top 18% of the peer universe of public pension plans; the three-, five-, 10-, 20-, and 25-year returns for the periods ended June 30, 2017, were 5.8%, 9.8%, 5.7%, 6.8%, and 8.2%, respectively. NHRS performed better than 90% of its peers over the threeand five-year periods and better than 80% of its peers over the one-, 10-, 20-, and 25-year periods.
- Developed and documented a comprehensive business continuity plan to ensure continuity of core services in the event of disruptive events.
- Made several upgrades to My Account, the retirement system's secure online member portal, including enhanced security for enrollment and the capability for registered users to file for retirement electronically.
- Revised and refined Mission, Vision, and Values statement to be more concise, memorable, forward-focused -"To provide secure retirement benefits and superior service."
- Developed educational presentations and online materials for new members as part of a multi-year effort to expand education and outreach to members, retirees, and employers.
- Successfully implemented requirements of GASB 74 (Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans).
- Earned a Certificate of Achievement for Excellence in Financial Reporting for both the Comprehensive Annual Financial Report (CAFR) and Summary CAFR.
- Developed a Fraud Policy that provides a framework for the responsible and professional conduct by all NHRS employees and members of the Board of Trustees who may find themselves in a position of suspecting or identifying potentially fraudulent activities related to NHRS.
- Marked the 50th anniversary on the retirement system throughout FY 2017.

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 2017, 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, 2017 actuarial valuation will be used to determine employer contribution rates for fiscal years 2020 and 2021. 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, 2016, 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 25 of the past 26 years. A copy of the fiscal year 2016 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 consistently generated superior returns in accordance with the Board's investment policy.

Respectfully submitted,

George P. Lagos

Executive Director

Heather Fritzky

Director of Finance

FINANCIAL section

NHRS paid out \$706 million in pension benefits in Fiscal Year 2017. The average annual pension benefit is just under \$20,000.











50 Years of Providing Secure Retirement Benefits and Superior Service



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, 2017, 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, 2017, and the changes in its fiduciary net position for the year then ended in accordance with U.S. generally accepted accounting principles.

EMPHASIS OF MATTER

As discussed in Note 2 to the financial statements, in 2017 the System adopted Governmental Accounting Standards Board Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Our opinion is not modified with respect to this matter.

OTHER MATTERS

Report on Summarized Comparative Information

We have previously audited the System's 2016 financial statements, and we expressed an unmodified opinion on those audited financial statements in our report dated December 20, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016 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 employers' net pension liability and related ratios, employer contributions – pension plan, changes in employers' net OPEB liability and related ratios, employer contributions – OPEB plan, investment returns and the related notes to required supplementary information on pages 48-51, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who consider it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or 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 for the year ended June 30, 2017 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's 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, 2017 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 for the year ended June 30, 2017.

We also previously audited, 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, the basic financial statements of the System as of and for the year ended June 30, 2016 (not presented herein), and have issued our report thereon dated December 20, 2016, which contained an unmodified opinion on those financial statements. The Supporting Schedules as of and for the year ended June 30, 2016 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 2016 financial statements. Such information has been subjected to the auditing procedures applied in the audit of the 2016 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 are fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2016.

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 12, 2017 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 the effectiveness of 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.



December 12, 2017



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, 2017 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

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, 2017 with summarized comparative information for fiscal year 2016. In addition, Required Supplementary Information is provided for the Pension and OPEB plan. The excess of assets over liabilities is reported as "Net Position Restricted for Pension and Other Post Employment Benefits (OPEB)."

FINANCIAL HIGHLIGHTS

Net position increased by \$832.3 million (11.2%) from the prior year's net position reflecting strong performance results across all asset classes.

Net investment income during fiscal year 2017 was \$982.6 million, a \$920.6 million (1,484.8%) increase over the prior fiscal year. The net investment income for fiscal year 2017 reflects a time-weighted return for the total fund during the year of 13.5% compared to a time-weighted investment return of 1.0% for the fiscal year ended June 30, 2016.

The total contributions received during the fiscal year were \$638.9 million. For fiscal year 2016, total contributions received were \$623.6 million.

Employer contributions for fiscal year 2017 increased 2.4%, to \$425.8 million, compared with employer contributions in fiscal year 2016 of \$415.7 million. The increase in employer contributions in fiscal year 2017 was primarily due to higher contribution rates.

Member contributions were \$213.1 million in fiscal year 2017, an increase of 2.5% over fiscal year 2016 member contributions of \$207.9 million. The increase in member contributions is primarily due to an increase in pensionable wages for contributing members. Overall member normal contributions increased by \$5.2 million or 2.5% over the prior fiscal year. Voluntary member contributions decreased by \$0.1 million or -6.4% over fiscal year 2016.

Benefits paid during fiscal year 2017 were \$756.9 million, an increase of 4.8% over benefits paid in fiscal year 2016 of \$722.2 million. The increase in benefits paid in fiscal year 2017 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, 2017 and June 30, 2016.

Condensed Comparative Plan Net Position — Combined Plans (Dollar Values Expressed in Millions)

	As of June 30, 2017	As of June 30, 2016	Amount Increase (Decrease)	Percentage Increase (Decrease)
Cash Receivables Investments	\$ 9.3 107.3 8,205.2	\$ 6.7 122.9 7,372.7	\$ 2.6 (15.6) 832.5	38.8% (12.7%) 11.3%
Other Assets	0.2	0.2	-	0.0%
Total Assets	\$ 8,322.0	\$ 7,502.5	\$ 819.5	10.9%
Other Liabilities	28.7	41.5	(12.8)	(30.8%)
Total Liabilities	\$ 28.7	\$ 41.5	\$ (12.8)	(30.8%)
Net Position Restricted for Pension and Other Post Employment Benefits	\$ 8,293.3	\$ 7,461.0	\$ 832.3	11.2%

Total assets increased by \$819.5 million (10.9%) in fiscal year 2017. Cash on hand at fiscal year end was \$9.3 million (38.8%) higher than at fiscal year end 2016 reflecting lower draw downs of liquidity reserves necessary to meet operating obligations. Receivables decreased by \$15.6 million (12.7%) over the prior fiscal year primarily due to a decrease in the pending sales of securities at fiscal year end. Investments increased by \$832.5 million (11.3%) in fiscal year 2017. The increase in investments is attributable to the strong absolute and relative performance of all asset classes. Other assets remain unchanged at \$0.2 million for fiscal year 2017.

Total liabilities decreased by \$12.8 million (30.8%) at the end of fiscal year 2017 primarily due to a decrease in the liabilities (due to) OPEB plan at fiscal year end.

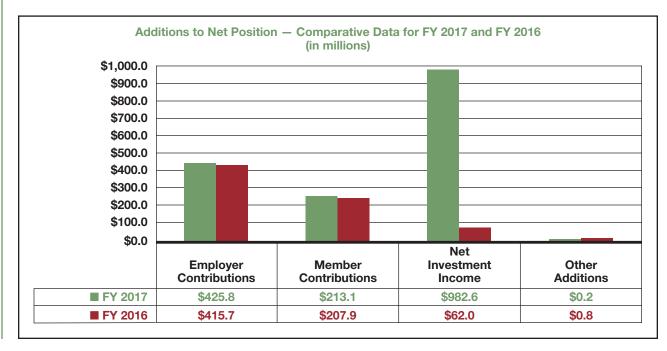
Condensed Comparative Changes in Plan Net Position — Combined Plans (Dollar Values Expressed in Millions)

	 ar Ended e 30, 2017	 r Ended 30, 2016	Inc	mount crease crease)	Percentage Increase (Decrease)
ADDITIONS:					
Employer Contributions	\$ 425.8	\$ 415.7	\$	10.1	2.4%
Member Contributions	213.1	207.9		5.2	2.5%
Net Investment Income	982.6	62.0		920.6	1,484.8%
Other Income	0.2	8.0		(0.6)	(75.0%)
Total Additions to Plan Net Position	\$ 1,621.7	\$ 686.4	\$	935.3	136.3%
DEDUCTIONS:					
Benefits Paid	\$ 756.9	\$ 722.2	\$	34.7	4.8%
Refunds of Contributions	23.4	24.2		(8.0)	(3.3%)
Administrative Expense	7.7	7.1		0.6	8.5%
Other Deductions	1.4	2.0		(0.6)	(30.0%)
Total Deductions from Plan Net Position	\$ 789.4	\$ 755.5	\$	33.9	4.5%
Total Changes in Plan Net Position	\$ 832.3	\$ (69.1)	\$	901.4	1,304.5%

ADDITIONS TO NET POSITION

For fiscal year 2017, the combined total of employer and member contributions increased by \$15.3 million or 2.5%. Employer contributions increased from \$415.7 million in fiscal year 2016 to \$425.8 million or 2.4% in fiscal year 2017. The increase in employer contributions is primarily due to higher earnable compensation rates. Member contributions for fiscal year 2017 were \$213.1 million, an increase of \$5.2 million or 2.5% from fiscal year 2016. Member normal contributions increased \$5.2 million or 2.6% in fiscal year 2017 and voluntary member contributions decreased by \$0.1 million or 1.5%.

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 income gain in fiscal year 2017 of \$982.6 million compared with a net investment income gain in fiscal year 2016 of \$62.0 million. The net change from year-to-year was \$920.6 million or 1,484.8%, a significant increase from fiscal year 2016. The increase in investment income was driven by strong performance across all asset classes but particularly within the equity component as U.S. and Non-U.S. equity accounted for the majority of the increase returning

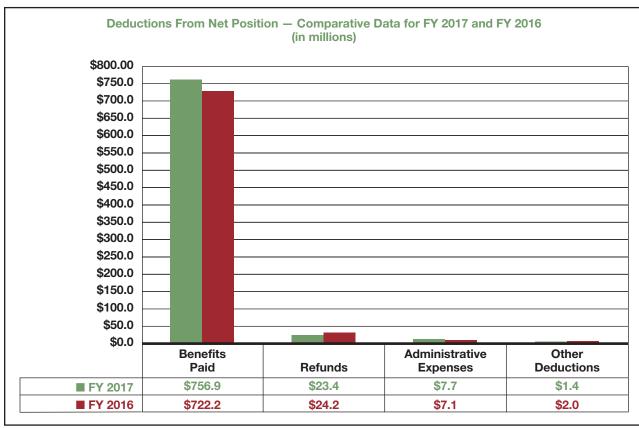


19.3% and 20.1% for the fiscal year, respectively. Alternative investments (primarily private debt and equity) and real estate also enhanced returns, generating 11.9% and 9.1%, respectively. These asset classes benefited from the continued economic expansion in the U.S. combined with an uptick in global growth outside the U.S. which lead to the significant returns mentioned above.

DEDUCTIONS FROM NET POSITION

Total benefits paid in fiscal year 2017 were \$756.9 million, an increase of \$34.7 million or 4.8% over the fiscal year 2016 level of \$722.2 million. Pension benefits paid in fiscal year 2017 were \$706.3 million, an increase of \$35.9 million or 5.4% compared with the pension benefits paid in fiscal year 2016 of \$670.4 million. The increase in pension benefits paid in fiscal year 2017 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 2017 were \$50.6 million, which was slightly lower than the benefits paid in 2016. Future OPEB benefit payments will remain flat or go down over time since there is a very small population of active members that can still qualify for this benefit. Refunds of contributions were \$23.4 million, a decrease of \$0.8 million or 3.3% over the 2016 level of \$24.2 million. The decrease reflects a decrease in the number and dollar value of refund requests from terminated members in 2017.

Administrative expenses increased by \$0.6 million or 8.5% in fiscal year 2017 to a level of \$7.7 million compared with \$7.1 million in 2016. Administrative expenses increased primarily due to increased technology, wage, and benefit cost.



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 vear end. The liabilities that were used to determine the funded ratios for both the Pension and OPEB plan were determined using the entry age normal actuarial cost method for both fiscal year 2017 and 2016.

The total pension liability under GAAP at June 30, 2017, was \$13,172.0 million. The fiduciary net position available to pay pension benefits at June 30, 2017 was \$8,254.0 million, resulting in a net pension liability of \$4,918.0 million and a total pension liability of 62.7% of the plan fiduciary net position at June 30, 2017, as of June 30, 2016, it was \$12,751.9 million. The plan fiduciary value of assets 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 funded ratio of 58.3%.

The total OPEB liability under GAAP at June 30, 2017, was \$496.5 million. The fiduciary net position available to pay postemployment medical benefits at June 30, 2017 was \$39.3 million resulting in a net OPEB liability of \$457.2 million and an OPEB liability of 7.9% at June 30, 2017. As of June 30, 2016, the total OPEB liability was \$510.7 million. The fiduciary net position available to pay OPEB benefits at June 30, 2016 was \$26.6 million resulting in a net OPEB liability of \$484.1 million and a net OPEB liability of 5.2%.

NEW ACCOUNTING PRONOUNCEMENT

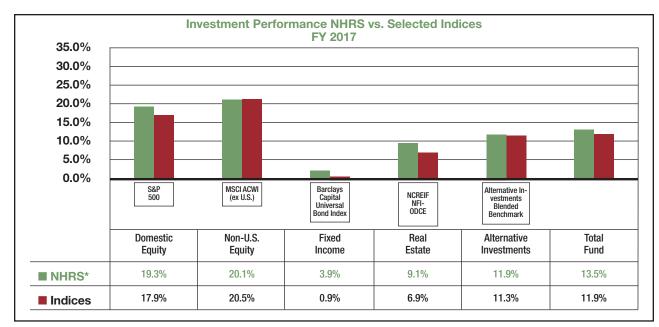
In fiscal year 2017, the System adopted the provisions of GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (GASB 74), which is effective for all state and local governments OPEB plans for periods beginning after June 15, 2016. More information can be found in note 2 beginning on page 32.

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 (50%), fixed income investments (22%), and cash equivalents (2%) comprise approximately 75% of invested assets at June 30, 2017. The remaining 25% of assets are invested in real estate (10%) and alternative investments (15%), 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, 2017, the Plans' total fund timeweighted rate of return was 13.5% compared to 1.0% for the fiscal year ended June 30, 2016. The difference in yearover-year performance was due to the strength of the global capital markets across all asset classes.



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

The total NHRS fund time-weighted rate of return of 13.5% for fiscal year 2017 outperformed the total fund custom index (a blended composition of major market indices in proportion to the NHRS' asset allocation), which returned 11.9%, by 160 basis points. The NHRS outperformed relative to the benchmark, the NHRS also outperformed 82% of its peers. Domestic Equity generated a return of 19.3%, outperforming the Russell 3000 Index return of 17.9% by 140 basis points. The non-U.S. equity portfolio returned 20.1% during fiscal year 2017, underperforming the MSCI ACWI (ex U.S.) benchmark return of 20.5% by 40 basis points. Fixed income returned 3.9% and outperformed the Barclays Capital Universal Bond Index benchmark return of 0.9% by 300 basis points. The real estate portfolio gained 9.1% and outperformed the NCREIF Property Index +50% benchmark return of 6.9% by 220 basis points. The alternative investment class provided a 11.9% return and outperformed the blended benchmark return of 11.3% by 60 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 and OPEB Plan for the year ended June 30, 2017. Detailed information regarding NHRS' investments as of June 30, 2017 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.

BASIC FINANCIAL STATEMENTS

PENSION AND OTHER POSTEMPLOYMENT MEI AS OF JUNE 30, 2017 (with summarized financial			6)	(in thousands)
	PENSION PLAN 2017	OPEB PLAN 2017	N TOTAL 2017	TOTAL 2016
ASSETS:				
Cash	\$ 9,345	\$ 37	\$ 9,382	\$ 6,747
Receivables:				
Due from Employers	40,606	7,152	47,758	46,545
Due from Plan Members	23,038	_	23,038	22,389
Due from Brokers for Securities Sold	15,746	62	15,808	29,961
Interest and Dividends	17,416	68	17,484	17,857
Other	3,150	12	3,162	1,675
TOTAL RECEIVABLES	99,956	7,294	107,250	118,427
Investments at Fair Value: Cash and Cash Equivalents Equity Investments: Domestic Non-U.S.	184,444 2,923,484 1,203,362	723 11,466 4,719	185,167 2,934,950 1,208,081	140,787 2,590,619 1,102,962
Fixed Income Investments:	1,200,002	1,7 10	1,200,001	1,102,002
Domestic Non-U.S.	1,590,758 216,658	6,239 850	1,596,997 217,508	1,518,076 247,336
Real Estate	812,108	3,185	815,293	787,937
Alternative Investments	1,242,313	4,872	1,247,185	984,973
TOTAL INVESTMENTS	8,173,127	32,054	8,205,181	7,372,690
Other Assets	170	1	171	189
TOTAL ASSETS	8,282,598	39,386	8,321,984	7,498,053
LIABILITIES:				
Management Fees and Other Payables Due to Brokers for Securities Purchased	9,594 19,016	38 75	9,632 19,091	8,456 28,652
TOTAL LIABILITIES	28,610	113	28,723	37,108
NET POSITION RESTRICTED FOR PENSION AND OTHER POST EMPLOYMENT BENEFITS (OPEB		\$39,273	\$8,293,261	\$7,460,945

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

COMBINING STATEMENTS OF CHANGES IN FILE PENSION AND OTHER POSTEMPLOYMENT ME FOR THE YEAR ENDED JUNE 30, 2017	DICAL PLAN (OPI	EB)		
(with summmarized financial information for the	e year ended June	30, 2016)		(in thousands)
	PENSION PLAN 2017	OPEB PLAN 2017	TOTAL 2017	TOTAL 2016
ADDITIONS:				
Contributions: Employer — Normal Employer — Other	\$ 366,487 166	\$59,197 —	\$ 425,684 166	\$ 415,508 148
Total Employer Contributions	366,653	59,197	425,850	415,656
Plan Member	213,061	_	213,061	207,949
Total Contributions	579,714	59,197	638,911	623,605
Investment Income (Loss)				
From Investment Activities: Net Appreciation (Depreciation) in Fair Value of Investments Interest Dividends Net Real Estate Income Alternative Investment Income	831,995 55,205 73,184 16,450 27,270	3,440 228 303 68 113	835,435 55,433 73,487 16,518 27,383	(73,079) 53,979 74,165 8,361 22,576
Total Income from Investment Activities	1,004,104	4,152	1,008,256	86,002
Less: Investment Expenses: Investment Management Fees Custodial Fees Investment Advisor Fees Investment Administrative Expense	23,538 611 737 624	97 3 3 3	23,635 614 740 627	22,007 624 735 610
Total Investment Expenses	25,510	106	25,616	23,976
Total Net Investment Income	978,594	4,046	982,640	62,026
TOTAL ADDITIONS	1,558,308	63,425	1,621,551	685,631
DEDUCTIONS: Benefits Paid Refunds of Contributions Administrative Expense Professional Fees Other	706,304 23,408 7,671 992 263	50,560 - 32 4 1	756,864 23,408 7,703 996 264	722,165 24,233 7,078 952 314
TOTAL DEDUCTIONS	738,638	50,597	789,235	754,742
CHANGE IN NET POSITION	\$ 819,670	\$12,646	\$ 832,316	(\$ 69,111)
NET POSITION RESTRICTED FOR PENSION BENEFITS AND OPEB				
Beginning of the Year	\$7,434,318	\$26,627	\$7,460,945	\$7,530,056
End of the Year	\$8,253,988	\$39,273	\$8,293,261	\$7,460,945

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

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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 one separate cost-sharing multiple-employer postem-ployment medical subsidy healthcare plan (OPEB Plan). Collectively the Pension Plan and the postemployement medical subsidy healthcare plan 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/.

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, 2017 and 2016 are presented below.

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

EMPLOYERS CONTRIBUTING	2017	2016
State Government	1	1
City Governments	13	13
Town Governments and Related Entities	244	242
County Governments and Related Entities	12	12
School Districts and School Administrative Units	201	203
Total Employers	471	471
MEMBERSHIP DATA	2017	2016
Retired plan members (or their beneficiaries) currently receiving benefits	35,694	32,776
Inactive members entitled to but not yet receiving benefit payments	12,758	11,313
Active plan members	47,886	48,069
Total Membership	96,338	92,158

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 ¼ of 1% or age

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 PLAN (OPEB)

Pursuant to RSA 100-A:52, RSA 100-A:52-a and RSA 100-A:52-b, the NHRS administers a cost-sharing multiple employer defined benefit postemployment medical subsidy healthcare plan 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 Plan.

The OPEB Plan provides a medical insurance subsidy to qualified retired members. The medical subsidy is a payment made by NHRS to the former employer or their insurance administrator 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.

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 eliqible 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.

The OPEB plan is closed to new entrants.

The OPEB Plan is 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 2017, 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 Plan. Administrative costs are allocated to the OPEB Plan based on fund balances.

The type and number of employers contributing to the OPEB plan during the years ended June 30, 2017 and June 30, 2016 are presented below.

EMPLOYERS CONTRIBUTING	2017	2016
State Government	1	1
City Governments	13	13
Town Governments and Related Entities	244	242
County Governments and Related Entities	12	12
School Districts and School Administrative Units	201	203
Total Employers	471	471

Membership of the OPEB plan consisted of the following eligible retirees receiving benefits as of June 30, 2017 and 2016:

MEMBERSHIP DATA	2017	2016
Inactive plan members of beneficiaries currently receiving benefit payments	9,965	10,104
Inactive plan members entitled to but not yet receiving benefit payments	2,937	2,912
Active plan members	1,382	1,527
Total Membership	14,284	14,543

The maximum monthly subsidy amounts paid during fiscal year 2017 and 2016 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 Plan 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 Plan, 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 financial 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, 2016, from which the summarized information was derived.

PRIOR YEAR RECLASSIFICATIONS

Certain 2016 information has been reclassified to conform to the 2017 presentation. These reclassifications had no impact to the Net Position Held in Trust for Pensions and Other Post Employment Benefits.

INVESTMENTS

Investments are reported at fair value.

Investments in both domestic and non-U.S. marketable 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 NAVs for real estate investments recorded in this report were obtained from statements provided by the general partners of commingled funds. 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.

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-ininterest 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, 2017 was 13.4% and 0.9% for June 30, 2016. 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 2017, the System implemented the provisions of GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (GASB 74). GASB 74 supersedes the requirements of GASB Statements No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended; No. 57, OPEB Measurements by Agent Employer and Agent Multiple-Employer Plans and Note Disclosures for Defined Contribution Plans; and No. 50, Pension Disclosures. For cost-sharing multiple-employer postemployment benefit plans, GASB 74 requires disclosures of the total OPEB liability, fiduciary net position, net OPEB liability, and annual money-weighted rate of return on plan investments, among other disclosures. GASB 74 requires the net OPEB liability to be measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. GASB 74 also revises reporting requirements for required supplementary information to include, among other information, trend information regarding (1) components and sources of changes in the net OPEB liability, and related ratios; and (2) actuarially and contractually determined contributions of employer contributing entities.

In conjunction with the implementation of GASB 74, the System, with guidance from counsel, determined that because the OPEB obligations of more than one employer are pooled and the OPEB plan assets can be used to pay benefits of the retirees of any employer that provides OPEB through the OPEB plan, regardless of retiree class, the OPEB plan is considered a single plan for purposes of reporting in accordance with GASB 74. Accordingly, the summarized 2016 information has been reclassified to reflect the OPEB as one plan.

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, 2017 and 2016, as recommended by the Independent Investment Committee and adopted by the Board of Trustees, is as follows:

2	017	2016	
Target	Range	Target	Range
22.50% 7.50%		22.5% 7.5%	
30.00%	20-50%	30.0%	20-50%
13.00% 7.00%		13.0% 7.0%	
20.00%	15–25%	20.0%	15–25%
5.00% 2.00% 11.00% 7.00%		5.0% 2.0% 11.0% 7.0%	
25.00%	20–30%	25.0%	20–30%
5.00% 5.00% 5.00%		5.0% 5.0% 5.0%	
15.00%	0–25%	15.0%	0-25%
10.00%		10.0%	
10.00%	5–20%	10.0%	5–20%
100%		100.0%	
	Target 22.50% 7.50% 30.00% 13.00% 7.00% 20.00% 5.00% 2.00% 11.00% 5.00% 5.00% 5.00% 5.00% 15.00% 10.00%	22.50% 7.50% 30.00% 20–50% 13.00% 7.00% 20.00% 15–25% 5.00% 2.00% 11.00% 7.00% 25.00% 5.00% 5.00% 5.00% 5.00% 10.00% 5–20%	Target Range Target 22.50% 7.50% 7.5% 30.00% 20–50% 30.0% 13.00% 13.0% 7.0% 20.00% 15–25% 20.0% 5.00% 2.0% 11.0% 7.00% 2.0% 11.0% 7.00% 7.0% 25.0% 5.00% 5.0% 5.0% 5.00% 5.0% 5.0% 5.00% 5.0% 5.0% 5.00% 5.0% 5.0% 15.00% 0–25% 15.0% 10.00% 5–20% 10.0%

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, 2017 and 2016, NHRS held deposits of \$9.4 million and \$6.7 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 quidelines 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, 2017 and 2016:

EFFECTIVE DURATION — FIXED INCOME INVESTMENTS (dollars in thousands) AT JUNE 30, 2017

Investment Type	Fair Value June 30, 2017	Percentage of Fixed Income Investments	Effective Duration in Years	Weighted Average Effective Duration in Years
Collateralized/Asset Backed Obligations	\$ 145,486	8.0%	4.5	0.4
Corporate Bonds	590,951	32.6	5.5	1.8
Government and Agency Bonds	643,823	35.5	6.2	2.2
Commingled Fund	222,500	12.2	(0.4)	(0.04)
Commingled Fund	211,745	11.7	2.4	0.3
Totals	\$1,814,505	100.0%		4.7

EFFECTIVE DURATION — FIXED INCOME INVESTMENTS AT JUNE 30, 2016 Weighted Average Fair of Effective Effective

		Percentage		Average
	Fair	of	Effective	Effective
	Value	Fixed Income	Duration	Duration
Investment Type	June 30, 2016	Investments	in Years	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
Totals	\$ 1,765,412	100.0%		5.2

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, 2017 and 2016, including the distribution of those investments by Standard & Poor's quality credit ratings:

CREDIT QUALITY RISK — FIXED INCOME SECURITIES AT JUNE 30, 2017 (in thou								
		Quality Ra	tings¹					
	Fair Value				BBB			
Investment Type	June 30, 201	I7 AAA	AA	Α	or Lower	Unrated		
Collateralized/Asset Backed Obligations	\$ 145,486	\$103,914	\$ 2,455	\$ 6,317	\$ 17,692	\$15,108		
Corporate Bonds	590,951	5,323	46,638	123,602	413,399	1,989		
Government and Agency Bonds ²	152,631	13,374	25,186	65,352	48,719	_		
Commingled Fund ³	222,500	_	_	222,500	_	_		
Commingled Fund ³	211,745	_	211,745	_	_	_		
Totals	\$1,323,313	\$122,611	\$286,024	\$417,771	\$479,810	\$17,097		
Percent of Total Fair Value	100.00%	9.27%	21.61%	31.57%	36.26%	1.29%		

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.

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

CREDIT QUALITY RISK — FIXED INCOME SECURITIES AT JUNE 30, 2016							
Quality Ratings ¹							
Investment Type	Fair Value June 30, 20		AA	A	BBB or Lower	Unrated	
Collateralized/Asset Backed Obligations Corporate Bonds Government and Agency Bonds ² Commingled Fund ³ Commingled Fund ³	\$ 172,043 622,956 273,424 204,997 205,679	\$ 89,585 8,973 45,116 —	\$ 27,801 55,529 64,101 — 205,679	\$ 15,725 123,373 76,576 204,997	\$ 25,483 433,634 70,672 —	\$13,449 1,447 16,959 —	
Totals	\$1,479,099	\$143,674	\$353,110	\$420,671	\$529,789	\$31,855	
Percent of Total Fair Value	100.00%	9.71%	23.87%	28.44%	35.82%	2.16%	

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.

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, 2017 and 2016, the Plans' combined investment in asset-backed and mortgage-backed securities held in separate account portfolios totaled \$131.0 million and \$129.9 million, respectively.

²Government and Agency Bonds exclude U.S. government securities and securities explicitly guaranteed by the U.S. government (\$491,192) because these securities are not considered to have credit risk.

²Government 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.

³Average credit quality rating for the commingled funds was provided by GAM and Manulife 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, 2017, 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, 2017, non-U.S. fixed income securities represent 2.7% 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, 2017 and 2016 is presented on the following schedules:

FOREIGN CURRENCY RISK — NON-U.S. INVESTMENTS AS OF JUNE 30, 2017

(in thousands)

Currency	Equity*	Fixed Income	Real Estate & Alternative Investments	Cash and Cash Equivalents	Totals
Australian dollar	\$ 14,543	\$ 23,791	_	\$ -	\$ 38,334
Brazilian real	1,489	19,500	_	_	20,989
British pound sterling	113,267	20,382	6,522	6	140,177
Canadian dollar	27,985	5,195	_	127	33,307
Danish krone	12,866	· —	_	_	12,866
Euro	238,581	14,588	71,114	82	324,365
Hong Kong dollar	49,631	· —	_	_	49,631
Indonesian rupiah	4,853	15,175	_	_	20,028
Japanese yen	95,178	· —	21,247	64	116,489
Malaysian ringgit	_	17,981	_	_	17,981
Mexican peso	3,340	56,667	_	_	60,007
New Taiwan Dollar	3,838	· —	_	_	3,838
New Zealand dollar	· —	6,984	_	_	6,984
Norwegian krone	_	389	_	_	389
Polish zloty	_	20,095	_	_	20,095
South African rand	_	15,804	_	_	15,804
South Korean won	22,540	· —	_	19	22,559
Swedish krona	5,909	_	_	_	5,909
Swiss franc	70,368	_	_	_	70,368
Turkish lira	_	957	_	_	957
Total investments subject to					
foreign currency risk	\$664,388	\$ 217,508	\$ 98,883	\$ 298	\$ 981,077

^{*}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, 2016**

(in thousands)

Churchon	Equity*	Fixed Income	Real Estate & Alternative Investments	Cash and Cash	Totals
Currency	Equity*			Equivalents	
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
Total investments subject to					
foreign currency risk	\$547,467	\$247,336	\$76,917	\$ 1,045	\$ 872,765

^{*}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, 2017 and June 30, 2016 the System had outstanding equity futures with a notional value of \$3.8 million and \$2.6 million respectively. 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, 2017 and 2016 are shown below and on the following page:

OPEN FOREIGN CURRENCY EXCHANGE CONTRACTS **AT JUNE 30, 2017**

(in thousands)

	Local Currency Amount	Effective Date	Maurity Date	Original Foreign Exchange Rate	Unrealized Appreci- ation (USD)	Unrealized (Depre- ciation) (USD)
Foreign currency exchange contra	cts purchased:					
Australian Dollar	11,520	5/12/17	8/17/17	.738276 AUD/USD	327	_
Canadian Dollar	381	6/29/17	7/5/17	0.769231 CAD/USD	_	
Canadian Dollar	85	6/30/17	7/6/17	1.296200 CAD/USD	_	_
Canadian Dollar	13,980	6/13/17	8/4/17	1.321460 CAD/USD	192	_
Chilean Peso	4,300,000	2/28/17	7/14/17	653.300000 CLP/USD	_	(115)
Euro	43	6/29/17	7/3/17	1.1438000 EUR/USD	_	_
Euro	836	6/27/17	7/10/17	1.134120 EUR/USD	6	_
Euro	3,410	5/5/17	8/10/17	1.101720 EUR/USD	140	_
Hong Kong Dollar	1,966	6/29/17	7/3/17	0.1281130 HKD/USD	_	_
Hong Kong Dollar	1,303	6/30/17	7/3/17	7.8064000 HKD/USD	_	_
ndian Rupee	1,034,000	6/15/17	9/20/17	65.264000 INR/USD	15	_
Japanese Yen	24,410	6/27/17	7/3/17	111.8335000 JPY/USD		(1)
Japanese Yen	1,779,000	4/27/17	8/2/17	110.716500 JPY/USD	_	(215)
Norwegian Krone	76,900	4/5/17	7/10/17	8.584450 NWK/USD	224	(210)
Norwegian Krone	62,800	5/10/17	8/15/17	8.602410 NWK/USD	203	
Norwegian Krone	56,600	5/11/17	8/15/17	8.581440 NWK/USD	167	
Pound Sterling	7	6/29/17	7/3/17	1.3000000 GBP/USD	—	
Pound Sterling	24,870	6/6/17	9/15/17	1.293490 GBP/USD	208	_
Swedish Krona	105,400	4/19/17	7/21/17	8.931900 SWK/USD	708	
Swedish Krona	82,800	5/31/17	9/12/17	8.63095 SWK/USD	262	
Turkish Lira	3,504	6/29/17	7/5/17	3.523700 YTL/USD		
Foreign currency exchange contra	· · · · · · · · · · · · · · · · · · ·	0/23/17	1/5/11	3.323700 TTL/00D		
		6/29/17	7/3/17	0.7670E00.HCD/MID		
Australian Dollar	205 322			0.7670500 USD/AUD	_	
Australian Dollar		6/30/17	7/5/17	0.7670430 USD/AUD	<u> </u>	(11)
Chilean Peso	4,727	3/30/17	7/14/17	0.001504 USD/CLP	_	(11)
Chilean Peso	1,720	3/31/17	7/14/17	0.001504 USD/CLP	_	(10)
Danish Krone	13	6/29/17	7/3/17	0.1534020 USD/DKK	_	_
Danish Krone	6	6/30/17	7/5/17	0.1534110 USD/DKK	_	_
Euro 	125	6/29/17	7/3/17	1.1405500 USD/EUR	_	
uro	48	6/30/17	7/5/17	1.1406090 USD/EUR	_	
uro	4	6/30/17	7/5/17	1.1406090 USD/EUR	_	(207)
Euro 	6,562	5/11/17	8/10/17	1.142811 USD/EUR	_	(307)
Euro	11,070	6/16/17	8/10/17	1.142811 USD/EUR	_	(233)
Japanese Yen	136	6/28/17	7/3/17	0.0089000 USD/JPY	_	_
Japanese Yen	122	6/28/17	7/3/17	0.0089000 USD/JPY	_	720
Japanese Yen	258	6/29/17	7/5/17	0.0089000 USD/JPY	_	(1)
Japanese Yen	64	6/29/17	7/5/17	0.0089000 USD/JPY	_	_
Japanese Yen	245	6/30/17	7/5/17	0.0089000 USD/JPY	_	_
Japanese Yen	91	6/30/17	7/5/17	0.0089000 USD/JPY		_
Japanese Yen	16,053	6/16/17	8/2/17	0.008911 USD/JPY	200	_
Pound Sterling	112	6/30/17	7/3/17	1.2989500 USD/GBP	_	_
Pound Sterling	56	6/30/17	7/5/17	1.298993 USD/GBP	_	_
South African Rand	985	6/29/17	7/5/17	0.076308 USD/ZAR	8	_
Swiss Franc	160	6/29/17	7/3/17	1.0442230 USD/CHF	_	_
Swiss Franc	125	6/30/17	7/5/17	1.044287 USD/CHF	_	_
otals					\$2,660	\$(893)

OPEN FOREIGN CURRI AT JUNE 30, 2016	ENCY EXCHANGE CO	ONTRACTS	3		(i	n thousands
	Local Currency Amount	Effective Date	Maurity Date	Original Foreign Exchange Rate	Unrealized Appreci- ation (USD)	Unrealized (Depre- ciation) (USD)
Foreign currency exchange con	ntracts purchased:					
Chilean Peso	3,498,200	3/4/16	7/8/16	689.4000000 CLP / USD	208	_
Chilean Peso	1,266,000	5/11/16	8/19/16	684.9000000 CLP / USD	56	_
Chilean Peso	2,720,000	5/24/16	9/26/16	700.9000000 CLP / USD	198	_
Chilean Peso	3,010,000	6/8/19	10/21/16	679.9200000 CLP / USD	76	_
Chilean Peso	3,719,000	6/21/16	11/7/16	683.8700000 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	_	
Foreign currency exchange co	ntracts sold:					
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	_	(3)
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)
	1 000	0/00/10	7/0/10	1.000000 1100 / 000		(1)

NOTE 4 FAIR VALUE MEASUREMENTS OF INVESTMENTS

1,293

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:

7/5/16

1.336806 USD / GBP

(14)

\$(1,721)

\$662

6/30/16

- 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 of 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, 2017 and 2016.

Pound Sterling

Totals

Investments are reported at fair value and categorized within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3).

- Level 1 Unadjusted quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value (NAV) as a practical expedient are not classified in the fair value hierarchy. At June 30, 2017 and 2016 the System had no plans or intentions to sell investments at amounts different from NAV.

The categorization of investments within the hierarchy is based on the pricing transparency of the investment and should not be perceived as the particular investment's risk.

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Following is a summary of investments as of June 30, 2017 and 2016.

						June 30	, 2017			
			Fa	ir Value Me	easu	rements l	Jsing		(ir	thousands)
Investments at Fair Value		Total	Act for Id	ted Prices in ive Markets entical Assets (Level 1)	Ok	gnificant Other oservable Inputs Level 2)	Significant Unobservable Inputs (Level 3)		: Asset e (NAV)	Unfunded Commitments
Short-term: Cash and Cash Equivalents	\$	185,167	\$	175,043	\$	10,124	\$ -	\$	_	_
Fixed Income:										
U.S Government Obligations (1) Domestic Fixed Income (2) Commingled Funds (3)		393,641 769,111 434,245 217,508		363,018 7,284 —		30,623 761,827 — 217,508	_ _ _	43	_ 4,245	=
International Fixed Income (4)		217,300		_		217,506	_		_	_
Equity: Domestic Equity Securities Commingled Funds (5) International Equity Securities	2	2,802,758 662,221 678,052	2	2,799,295 — 678,052		3,463 _ _	_ _ _	66	_ 2,221 _	_ _ _
Real Estate: Real Estate Funds (6)		815,293		_		_	_	81	5,293	120,985
Alternative Investments: Private Equity (7) Private Debt (8) Opportunistic (9)		612,575 420,218 214,392		<u>-</u>		=	=	42	2,575 0,218 4,392	687,797 141,674 —
Total Investments	\$8	3,205,181	\$4	1,022,692	\$1	,023,545	\$ -	\$3,15	8,944	\$950,456

- (1) Fiscal 2017 rates range from 0.750% to 6.000%, and maturities from 2017 to 2046. Fiscal 2016 rates range from 0.625% to 6.770%, and maturities from 2017 to 2046.
- (2) Fiscal 2017 rates range from 0.00% to 11.000%, and maturities from 2016 to 2057. Fiscal 2016 rates range from 0.000% to 10.500%, and maturities from 2016 to 2057.
- (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 2017 rates range from 1.250% to 10.600%, and maturities from 2017 to 2064. Fiscal 2016 rates range from 0.250% to 10.250%, and maturities
- from 2016 to 2064.
- (5) This represents investments in five commingled equity funds 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 real estate funds consisting of 10 strategic core open-end funds and 35 opportunistic/tactical non-core 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. NHRS has no direct property investments as of June 30, 2017.
- 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.
- This represents 16 investments in private partnerships focused primarily on the following strategies: direct lending, mezzanine and distressed debt. These private partnerships typically have 6 to 10 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 assets.

 (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.

							June 30	, 2016					
			Fa	air	Value Me	eası	ırements l	Jsing		(in thousands)			
Investments at Fair Value		Total	Ac	tive den	d Prices in e Markets tical Assets evel 1)	0	ignificant Other bservable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	,	Net Asset Value (NAV)		nfunded imitments	
Short-term: Cash and Cash Equivalents	\$	140,787	\$	1	140,787	\$	_	\$-	\$	_	\$		
Fixed Income: U.S Government Obligations (1) Domestic Fixed Income (2) Commingled Funds (3) International Fixed Income (4)		286,313 821,087 410,676 247,336		2	246,469 5,904 —		39,844 815,183 — 247,336	_ _ _ _		- 410,676 -		_ _ _	
Equity: Domestic Equity Securities Commingled Funds (5) International Equity Securities	2	2,590,619 544,447 558,515	2		587,812 — 558,515		2,807	=		544,447 —			
Real Estate: Real Estate Funds (6)		787,937			_		_	_		787,937	1	111,172	
Alternative Investments: Private Equity (7) Private Debt (8) Opportunistic (9)		453,602 324,961 206,410			=		=	=		453,602 324,961 206,410		815,073 194,325 —	

(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.

\$1,105,170

\$2,728,033

\$3,539,487

- 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.

- 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 assets.
- (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 - NET LIABILITY OF EMPLOYERS - PENSION AND OPEB

\$7,372,690

PENSION

Total Investments

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

CHEDULE OF NET	IEDULE OF NET PENSION LIABILITY OF EMPLOYERS							
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)				
6/30/2017 6/30/2016	\$13,171,981 \$12,751,913	\$8,253,988 \$7,434,318	\$4,917,993 \$5,317,595	62.7% 58.3%				

ACTUARIAL ASSUMPTIONS

The total pension liability as of June 30, 2017 is based on an actuarial valuation performed as of June 30, 2016 rolled forward to June 30, 2017. The roll-forward procedure increases the June 30, 2016 actuarial accrued liability with normal cost and interest and decreases it with actual benefit payments and administrative expenses paid.

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 on pg. 45. 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 longterm 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-percentagepoint 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 Current Single Rate** 1% Increase 1% Decrease **Ended** to 6.25% **Assumption 7.25%** to 8.25% 6/30/2017 \$6,479,209 \$4.917.993 \$3,638,638 6/30/2016 \$6,832,748 \$5,317,595 \$4,061,017

The June 30, 2016 actuarial valuation rolled forward to June 30, 2017 used the following actuarial assumptions:

Price Inflation	2.5% per year		
Wage Inflation	3.25% per year		
Salary Increases 5.6% average, including inflation			
Investment Rate of Return	7.25% per year, net of investment expenses, including inflation		
Retirement Age	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.		
Mortality	RP-2014 mortality tables, generationally projected with Scale MP-2015.		

OPEB

The net OPEB liability of employers as of June 30, 2017 and 2016 is shown below:

SCHEDULE OF NE	T OPEB LIABILITY OF	EMPLOYERS		(\$ in thousands)
Fiscal Year Ended	(a) Total OPEB Liability	(b) Plan Net Position	(c) Net OPEB Liability (a-b)	(d) Plan Net Position as a % of Total Pension Liability (b/a)
6/30/17 6/30/16	\$496,507 \$510,733	\$39,273 \$26,627	\$457,234 \$484,106	7.9% 5.2%

ACTUARIAL ASSUMPTIONS

The total OPEB liability as of June 30, 2017 is based on an actuarial valuation performed as of June 30, 2016 rolled forward to June 30, 2017. The roll-forward procedure increases the June 30, 2016 actuarial accrued liability with normal cost and interest and decreases it with actual benefit payments and administrative expenses paid.

A single discount rate of 7.25% was used to measure the total OPEB liability. This single discount rate was based on the expected rate of return on OPEB plan investments of 7.25%, which is not reported net of the inflation assumption used to obtain the real weighted returns shown on pg. 45. The projections of cash flows used to determine this single discount rate assumed that employer contributions will be made under the current statutes RSA 100-A:16 and 100-A:53. Based on this assumption, the OPEB 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 OPEB plan investments was applied to all period of projected benefit payments to determine the total OPEB liability.

The following table provides the sensitivity of the net OPEB liability to changes in the discount rate. In particular, the table presents the plan's net OPEB 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.

GASB 74 requires the sensitivity of the net OPEB liability to the healthcare cost trend assumption. Since the medical subsidy benefits are a fixed stipend, there is no sensitivity to change in the healthcare cost trend assumption.

SENSITIVITY OF THE NET O SINGLE DISCOUNT RATE A	(\$ in thousands)		
Fiscal Year	1% Decrease	Current Single Rate	1% Increase
Ended	to 6.25%	Assumption 7.25%	to 8.25%
6/30/17	\$497,607	\$457,234	\$422,254
6/30/16	\$526,463	\$484,105	\$447,489

The June 30, 2016 actuarial valuation folled forward to June 30, 2017 used the following actuarial assumptions:

Duine Inflation	0.50/
Price Inflation	2.5% per year
Wage Inflation	3.25% per year
Salary Increases	5.6% average, including inflation
Investment Rate of Return	7.25% net of OPEB plan investment expense, including inflation
Retirement Age	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 2010–2015.
Mortality	RP-2014 Healthy Annuitant and Employee generational mortality tables for males and females with creditable adjustments, adjusted for fully generational mortality improvements using Scale MP-2015, based on the last experience study.
Health Care Trend Rates	N/A — Benefits are fixed stipends
Aging Factors	N/A — Benefits are fixed stipends

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 2017 and the geometric real rates of return for each asset class:

LONG-TERM EXPECTED REAL RATE OF RETURN

		Weighted Average Long-Term Expected Real Rate of Return*
Asset Class	Target Allocation	2017
Large Cap Equities Small/Mid Cap Equities	22.50% 7.50%	4.25% 4.50%
Total Domestic Equity	30.00%	
Int'l Equities (unhedged) Emerging Int'l Equities	13.00% 7.00%	4.50% 6.25%
Total International Equity	20.00%	
Core Bonds Short Duration Global Multi-Sector Fixed Income Absolute Return Fixed Income	5.00% 2.00% 11.00% 7.00%	0.75% (0.25%) 2.11% 1.26%
Total Fixed Income	25.00%	
Private Equity Private Debt Opportunistic	5.00% 5.00% 5.00%	6.25% 4.75% 2.84%
Total Alternative Investments	15.00%	
Real Estate	10.00%	3.25%
TOTAL	100.00%	

^{*}Real rates of return are presented net of the inflation assumption, which was 3.25% for 2017.

NOTE 6-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, 2017 is \$2,667.6 million and the annual covered payroll for the fiscal year ended June 30, 2016 was \$2,601.4 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 plan.

TOTAL CONTR	IBUTION RATE	ES — PENSI	ON PLAN					
	Member	(FY 20	17)		Member	(FY 20	16)	
Member Category	Normal Share	Emp State	oloyer Normal S Local	hare Total	Normal Share	State E	Employer Normal S Local	hare Total
Employees								
State	7.00%	10.86%	_	10.86%	7.00%	10.86%	_	10.86%
Local	7.00%	_	10.86%	10.86%	7.00%	_	10.86%	10.86%
Teachers	7.00%	_	12.72%	12.72%	7.00%	_	12.72%	12.72%
Police Officers								
State	11.55%	22.54%	_	22.54%	11.55%	22.54%	_	22.54%
Local	11.55%	_	22.54%	22.54%	11.55%	_	22.54%	22.54%
Firefighters								
State	11.80%	25.32%	_	25.32%	11.80%	25.32%	_	25.32%
Local	11.80%	_	25.32%	25.32%	11.80%	_	25.32%	25.32%

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 Plan is 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 2017 and 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 Plan. Administrative costs are allocated to the OPEB Plan based on fund balances.

TOTAL	CONTRIBUTION	RATES -	- OPEB PLAN

	Manusland	(FY 201	7)		Manuface	(FY 201	6)	
Member Category	Member Normal Share	Emp State	loyer Normal Sh Local	nare Total	Member Normal Share	En State	nployer Normal Sh Local	are Total
Employees								
State	_	1.64%	_	1.64%	_	1.64%	_	1.64%
Local	_	_	0.31%	0.31%	_	_	0.31%	0.31%
Teachers	_	_	2.95%	2.95%	_	_	2.95%	2.95%
Police Officers								
State	_	3.84%	_	3.84%	_	3.84%	_	3.84%
Local	_	_	3.84%	3.84%	_	_	3.84%	3.84%
Firefighters								
State	_	3.84%	_	3.84%	_	3.84%	_	3.84%
Local	_	_	3.84%	3.84%	_	_	3.84%	3.84%

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 AMOUNT	DUNTS CONTRIBUTED — PENSION AND OPEB PLAN (in thousands)							
Member Category	Member Normal Share**	(FY 20 ⁻ Emp Pension Plan*	17) lloyer Normal S OPEB Plan*	Share Total Contributions	Member Normal Share**	(FY 201 En Pension Plan*	6) nployer Normal S OPEB Plan*	Share Total Contributions
Employees	\$ 85,393	\$129,027	\$10,919	\$225,339	\$ 82,661	\$124,484	\$10,529	\$217,674
Teachers	77,957	138,575	32,030	248,562	76,681	136,335	31,791	244,807
Police Officers	34,748	66,926	11,407	113,081	34,031	65,589	11,166	110,786
Firefighters	14,963	31,959	4,841	51,763	14,576	30,926	4,688	50,190
Total Contributed	\$213,061	\$366,487	\$59,197	\$638,745	\$207,949	\$357,334	\$58,174	\$623,457

^{*}Includes contributions made by both State and local employers

^{**}Includes voluntary member contributions of \$4.5 million in FY 2017 and \$4.6 million in FY 2016.

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

Member Category	Member Normal Share**	(FY 2017 Emplo Pension Plan*	7) oyer Normal S OPEB Plan*	Share Total Contributions	Member Normal Share	(FY 2016 Em Pension Plan*) ployer Normal S OPEB Plan*	Share Total Contributions
Employees	7.24%	10.94%	0.93%	19.10%	7.27%	10.95%	0.93%	19.15%
Teachers	7.26%	12.91%	2.98%	23.16%	7.20%	12.79%	2.98%	22.97%
Police Officers	11.94%	23.00%	3.92%	38.86%	12.13%	23.38%	3.98%	39.49%
Firefighters	12.10%	25.85%	3.91%	41.86%	12.27%	26.04%	3.95%	42.26%
Total Contributed	7.99%	13.74%	2.22%	23.94%	7.99%	13.74%	2.24%	23.97%

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 2017 and 2016 were based on the June 30, 2013 actuarial valuation.

NOTE 7 — ADMINISTRATIVE EXPENSES

Certain expenses related to the administration of the Plans are budgeted and approved by the Board of Trustees, and were subject to appropriation biennially by the State Legislature. Total administrative expenses of \$7.7 million and \$7.1 million for June 30, 2017 and 2016, respectively, are included in the accompanying Combining Statements of Changes in Fiduciary Net Position.

Administrative expenses consist primarily of salaries and benefits for 58 full-time and part-time employees, the costs associated with operating and maintaining computer systems, and other administrative costs.

NOTE 8 — 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 NHRS's financial status.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

Fiscal Year Ended	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
	Julie 30, 2017	Julie 30, 2010	Julie 30, 2013	Julie 30, 2014
Total Pension Liability	Φ 000 000	Ф 000 070	Ф 040 OCE	Φ 045 000
Service Cost	\$ 262.626	\$ 266,379	\$ 243,965	\$ 245,828
Interest on the Total Pension Liability	906,201	875,247	847,646	815,214
Benefit Changes Difference Between Expected and Actu		_	_	_
•		18,404	(106.715)	
Experience of the Total Pension Liabi Assumption Changes	19,047)	815,023	(106,715)	_
Benefit Payments	(706,304)	(670,360)	(631,312)	(599,476
Refunds	(23,408)	(24,233)	(26,345)	(26,120
	, , ,	· · · · · · · · · · · · · · · · · · ·	* * *	
Net Changes in Total Pension Liability	420,068	1,280,460	327,239	435,446
Total Pension Liability — Beginning	12,751,913	11,471,453	11,144,214	10,708,768
Total Pension Liability — Ending	\$13,171,981	\$12,751,913	\$11,471,453	\$11,144,214
Plan Fiduciary Net Position	Φ 000 050	A 057.400	A 222 224	A 200 444
Contributions — Employer	\$ 366,653	\$ 357,482	\$ 332,294	\$ 328,444
Contributions — Member	213,061	207,949	204,063	199,033
Pension Plan Net Investment Income	978,594	61,878	249,806	1,092,586
Benefit Payments	(706,304)	(670,360)	(631,312)	(599,476
Refunds	(23,408)	(24,233)	(26,345)	(26,120
Pension Plan Administrative Expense	(7,671)	(7,061)	(7,582)	(7,377
Other Custodial, Professional and	/ 1055)	(1,000)	(1.000)	/ 1 110
Non-Investment Expenses	(1,255)	(1,263)	(1,626)	(1,446
Net Change in Plan Fiduciary Net Position		(75,608)	119,298	985,644
Plan Fiduciary Net Position — Beginning	7,434,318	7,509,926	7,390,628	6,404,984
Plan Fiduciary Net Position — Ending	\$8,253,988	\$ 7,434,318	\$ 7,509,926	\$ 7,390,628
Net Pension Liability	\$4,917,993	\$ 5,317,595	\$ 3,961,527	\$ 3,753,586
Plan Fiduciary Net Position as a Percentag	ge			•
of Total Pension Liability	62.7%	58.3%	65.5%	66.3%
Covered Employee Payroll	\$2,667,612	\$ 2,601,404	\$ 2,575,031	\$ 2,507,899
Net Pension Liability as a Percentage				
of Covered Employee Payroll	184.4%	204.4%	153.8%	149.7%

Schedule is intended to show information for 10 years. GASB 67 was adopted in 2014, and additional years will be added as they become available.

SCHEDULE OF	EMPLOYER CONTR	(\$ in thousands)			
Fiscal Year Ended	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
6/30/2017	\$366,653	\$366,653	_	\$2,667,612	13.7%
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%

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET OPE AND RELATED RATIOS		n thousands)
Fiscal Year Ended	June 30, 2017	June 30, 2016
Total OPEB Liability		
Service Cost	\$ 1,099	\$ 1,218
Interest on the Total OPEB Liability	35,235	36,542
Benefit Changes	_	<u> </u>
Difference between expected and actual experience		
of the Total OPEB Liability	_	(4,538)
Assumption Changes	_	<u> </u>
Benefit Payments	(50,560)	(51,805)
Refunds	_	_
Net Changes in Total OPEB Liability	(14,226)	(18,583)
Total OPEB Liability — Beginning	510,733	529,316
Total OPEB Liability — Ending	\$496,507	\$510,733
Plan Fiduciary Net Position		
Contributions — Employer	\$59,197	\$58,174
Contributions — Member	_	_
OPEB Plan Net Investment Income	4,046	149
Benefit Payments	(50,560)	(51,805)
Refunds	_	
OPEB Plan Administrative Expense	(32)	(17)
Other custodial, professional and non-investment expense		(3)
Net Change in Plan Fiduciary Net Position	12,646	6,498
Plan Fiduciary Net Position — Beginning	26,627	20,129
Plan Fiduciary Net Position — Ending	\$39,273	\$26,627
Plan Fiduciary Net Position as a Percentage of of Total OPEB	Liability 7.9%	5.2%
Covered Employee Payroll*	\$2,667,612	\$2,601,404
Net OPEB Liability as a Percentage of Covered Employee Pay		18.6%

Schedule is intended to show information for 10 years. GASB 74 was adopted in 2017, and additional years will be added as they become available. *Employers calculate and remit contributions to the OPEB plan based on the covered payroll of the pension plan, even though not all employees in the covered payroll presented are provided with OPEB through the OPEB plan.

SCHEDULE OF EMPLOYER CONTRIBUTIONS — OPEB PLAN

(\$ in thousands)

THE BOLL OF LIME LOTER CONTINUED HONO					(\$ III tilododildo)
Fiscal Year Ended	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
6/30/17	\$59,197	\$59,197	_	\$2,667,612	2.2%
6/30/16	58,174	58,174	_	2,601,404	2.2%
6/30/15	48,915	48,915	_	2,575,031	1.9%
6/30/14	48,881	48,881	_	2,507,899	1.9%
6/30/13	49,712	49,712	_	2,501,742	2.0%
6/30/12	48,964	48,964	_	2,487,757	2.0%
6/30/11	32,901	32,560	_	2,517,779	1.3%
6/30/10	32,560	32,560	_	2,481,384	1.3%
6/30/09	65,236	65,236	_	2,448,287	2.7%
6/30/08	61,706	61,706	_	2,308,321	2.7%

SCHEDULE OF INVESTMENT RETURNS

Fiscal Year Ended	Annual Money Weighted Rate of Return — Net of Investment Expenses
6/30/2017	13.4%
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 auditor's 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 1/4 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.

Years of Creditable Service as of January 1, 2012	Minimum Age	Minimum Service	Benefit Multiplier	
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 reults 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%

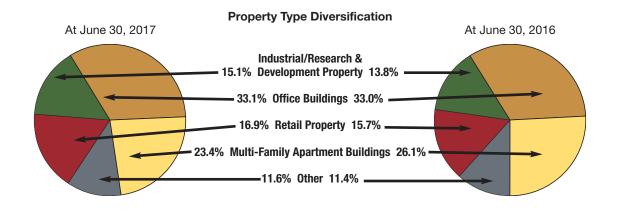
Demographic Assumptions were changed in the following categories:

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

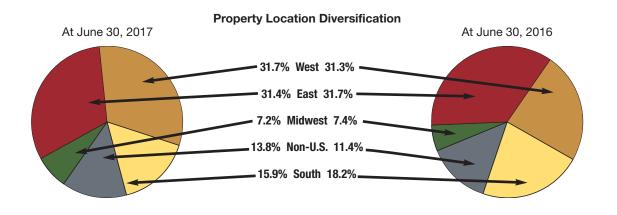
The full experience study results can be viewed at www.nhrs.org/docs/default-source/actuarial/july-1-2010---june-30-2015-experience-study.pdf

SUPPORTING **S**CHEDULES

REAL ESTATE INVESTMENTS BY TYPE	(in tho	usands)
	JUN	IE 30
	2017	2016
Office Buildings	\$269,092	\$259,758
Multi-Family Apartment Buildings	190,895	205,361
Retail Property	137,876	124,050
Industrial/Research & Development Property	122,874	109,068
Other	94,556	89,700
TOTAL REAL ESTATE INVESTMENTS BY TYPE	\$815,293	\$787,937



REAL ESTATE INVESTMENTS BY LOCATION	(in tho	usands)
	JUN	IE 30
	2017	2016
West	\$258,571	\$246,382
East	255,846	249,682
South	129,972	143,648
Midwest	58,713	58,047
Non-U.S.	112,191	90,178
TOTAL REAL ESTATE INVESTMENTS BY LOCATION	\$815,293	\$787,937



ALTERNATIVE INVESTMENTS	(in thousands)				
	JUNE 30				
	2017	2016			
Venture Capital	\$ 542	\$ 542			
Growth Equity	167,507	107,074			
Buyouts	204,243	123,305			
Secondaries	135,696	125,098			
Mezzanine	12,754	12,732			
Distressed	194,416	162,585			
Absolute Return Strategies	1,624	1,808			
Opportunistic	214,392	206,410			
Direct Lending Strategies	238,009	211,134			
Energy	78,002	34,285			
TOTAL ALTERNATIVE INVESTMENTS	\$1,247,185	\$984,973			

NET APPRECIATION (DEPRECIATION)					
IN FAIR VALUE OF INVESTMENTS	(in thousands)				
	YEAR ENDED JUNE 30				
	2017	2016			
Equity Investments:					
Domestic	\$ 406,326	\$(59,465)			
Non-U.S.	251,669	(127,878)			
Fixed Income Investments	21,840	23,877			
Temporary Investments	11	· -			
Real Estate	51,650	86,240			
Growth Equity	26,006	2,244			
Buyouts	21,583	7,014			
Secondaries	18,399	4,631			
Mezzanine	(979)	35			
Distressed	12,897	(2,188)			
Absolute Return Strategies	(184)	(220)			
Opportunistic	7,453	(8,969)			
Direct Lending	29	1,140			
Energy	18,735	460			
TOTAL NET APPRECIATION (DEPRECIATION)					
IN FAIR VALUE OF INVESTMENTS	\$ 835,435	\$(73,079)			

REAL ESTATE INVESTMENTS INCOME AND EXPENSES				(in thousands)							
YEAR E		INCOME YEAR ENDED JUNE 30 2017 2016		EXPENSE YEAR ENDED JUNE 30 2017 2016		UNE 30	NET IN YEAR ENDE 2017				
Office Buildings	\$	5,599	\$	3,240	\$	_	\$	_	\$	5,599	\$ 3,240
Multi-Family Apartment Buildings		5,782		2,722		_		_		5,782	2,722
Retail Property		2,696		416		_		3		2,696	413
Industrial/Research & Development Property		186		645		_		_		186	645
Hotels		860		_		_		57		860	(57)
Other		1,395		1,398		_		_		1,395	1,398
TOTAL	\$	16,518	\$	8,421	\$	_	\$	60	\$	16,518	\$ 8,361

INVESTMENT ACTIVITY FEES AND OTHER INVESTMENT RELATED EXPENSES	(in tho	usands)	
	YEAR END 2017	ED JUNE 30 2016	
INVESTMENT ACTIVITY FEES:			
Equity Investments:			
Domestic	\$ 8,669	\$ 8,174	
Non-U.S.	8,790	8,022	
Fixed Income Investments	4,211	3,990	
Real Estate	1,965	1,821	
Custodial Fees	614	624	
Investment Advisor Fees	740	735	
Investment Staff Administrative Expense	627	610	
TOTAL INVESTMENT ACTIVITY FEES	\$25,616	\$ 23,976	

INTEREST INCOME	(in thousands)				
	YEAR	ENDED JUNE 30			
	2017	2016			
Fixed Income Investments Cash and Cash Equivalents	\$ 54,024 1,409	\$ 53,017 962			
TOTAL INTEREST INCOME	\$ 55,433	\$ 53,979			

DIVIDEND INCOME	(in thousands) YEAR ENDED JUNE 30				
		2017		2016	
Equity Investments:					
Domestic	\$	48,113	\$	51,216	
Non-U.S.		25,374		22,949	
TOTAL DIVIDEND INCOME	\$	73,487	\$	74,165	

ALTERNATIVE INVESTMENT INCOME (LOSS)	(in thousands)				
	YEAR ENDED JUNE 30				
	2017	2016			
Distressed	\$ 870	\$ 3,574			
Secondaries	819	487			
Direct Lending	22,399	16,546			
Opportunistic	530	539			
Energy	232	(51)			
Mezzanine	1,301	832			
Buyouts	582	380			
Growth Equity	650	269			
TOTAL ALTERNATIVE INVESTMENT INCOME*	\$ 27,383	\$ 22,576			

^{*}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 53.

CONTRIBUTIONS	(in thousands)		
	YEAR END	ED JUNE 30	
	2017	2016	
CONTRIBUTIONS—PENSION PLAN			
EMPLOYER CONTRIBUTIONS:			
Employees	\$129,110	\$124,600	
Teachers	138,646	136,367	
Police Officers	66,930	65,591	
Firefighters	31,960	30,924	
Other	7	_	
TOTAL EMPLOYER CONTRIBUTIONS	\$366,653	\$357,482	
PLAN MEMBER CONTRIBUTIONS:			
Employees	\$ 85,393	82,661	
Teachers	77,957	76,681	
Police Officers	34,748	34,031	
Firefighters	14,963	14,576	
TOTAL PLAN MEMBER CONTRIBUTIONS	\$213,061	\$207,949	
TOTAL CONTRIBUTIONS—PENSION PLAN	\$579,714	\$565,431	
CONTRIBUTIONS — OPEB PLAN			
EMPLOYER NORMAL:			
OPEB Contributions	\$ 59,197	\$ 58,174	
TOTAL CONTRIBUTIONS — OPEB PLAN	\$ 59,197	\$ 58,174	
TOTAL CONTRIBUTIONS	\$638,911	\$623,605	

BENEFITS	(in thousands) YEAR ENDED JUNE 30		
	2017	2016	
PENSION BENEFITS AND ADDITIONAL ALLOWANCES:			
Employees	\$233,413	\$218,678	
Teachers	278,469	266,566	
Police Officers	131,767	125,567	
Firefighters	62,655	59,549	
TOTAL PENSION BENEFITS AND ADDITIONAL ALLOWANCES	\$706,304	\$670,360	
POSTEMPLOYMENT MEDICAL BENEFITS:			
Group II Police and Fire	\$ 16,837	16,528	
Group I Teachers	20,923	21,772	
Group I Political Subdivision Employees	5,344	5,681	
Group I State Employees	7,456	7,824	
TOTAL POSTEMPLOYMENT MEDICAL BENEFITS	\$ 50,560	\$ 51,805	
TOTAL BENEFITS	\$756,864	\$722,165	

REFUNDS OF CONTRIBUTIONS	(in thousands)
	YEAR ENDED JUNE 3 2017 2016
Employees	\$ 12,890 \$ 14,346
Teachers	5,927 6,421
Police Officers	3,638 3,032
Firefighters	953 434
TOTAL REFUNDS OF CONTRIBUTIONS	\$ 23,408 \$ 24,233

ADMINISTRATIVE EXPENSE FOR THE YEARS ENDED **JUNE 30, 2017 AND 2016**

(in thousands)

	2017 EXPENSE	UNAUDITED 2017 BUDGET*	UNAUDITED OVER (UNDER) BUDGET	2016 EXPENSE	UNAUDITED 2016 BUDGET*	UNAUDITED OVER (UNDER) BUDGET
Salaries and Wages	\$ 3,697	\$ 4,156	\$(459)	\$ 3,587	\$ 3,536	\$ 51
Fringe Benefits	1,942	2,576	(634)	1,829	1,874	(45)
Supplies, Utilities and Postage	226	334	(108)	210	206	4
Organizational Dues	6	20	(14)	11	11	_
Equipment	5	5	_	3	5	(2)
Travel — Staff	18	46	(28)	22	23	(1)
Board Expenses	15	39	(24)	17	17	
Employee Training	35	84	(49)	18	18	_
State Services	14	34	(20)	30	30	_
Office Rents and Expenses	491	513	(22)	512	510	2
Computer Support and System Development	1,059	1,268	(209)	698	831	(133)
Consulting	180	174	6	126	93	33
Workers Compensation	_	10	(10)	(2)	(2)	_
Unemployment Compensation	15	15		` 18	` 15	3
TOTAL	\$ 7,703	\$ 9,274	\$(1,571)	\$ 7,078	\$ 7,167	\$(89)

^{*}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 the	ousands)		
	YEAR ENDED JUNE 30				
		2017		2016	
Legal Fees	\$	496	\$	554	
Actuarial Fees		213		176	
Audit Fees		287		222	
TOTAL PROFESSIONAL FEES	\$	996	\$	952	

MEMBERSHIP COMPOSITION — PENSION PLAN			
		NE 30	
	2017	2016	
ACTIVE CONTRIBUTING MEMBERS:			
Employees	24,478	24,520	
Teachers	17,617	17,784	
Police Officers Firefighters	4,151 1,640	4,139 1,626	
TOTAL ACTIVE CONTRIBUTING MEMBERS*	47,886	48,069	
	47,000	40,009	
*Excludes inactives			
RETIRED MEMBERS:			
Employees	17,573	16,142	
Teachers	12,696	11,410	
Police Officers	3,786	3,629	
Firefighters	1,639	1,595	
TOTAL RETIRED MEMBERS	35,694	32,776	
TERMINATED MEMBERS ENTITLED TO BUT NOT YET RECEIV	ING DENIETITS:		
Employees	1,207	973	
Teachers	941	711	
Police Officers	115	89	
Firefighters	18	12	
TOTAL TERMINATED MEMBERS ENTITLED TO BUT			
NOT YET RECEIVING BENEFITS:	2,281	1,785	
INACTIVE MEMBERS: Non-Vested Inactive Members	10,477	9,528	
TOTAL TERMINATED AND INACTIVE MEMBERS	10,477	11,313	
MEMBERSHIP COMPOSITION — OPEB PLAN		NE 00	
	2017	NE 30 2016	
ACTIVE CONTRIBUTING MEMBERS	2011	2010	
ACTIVE CONTRIBUTING MEMBERS: OPEB Plan	1,382	1,527	
TOTAL ACTIVE CONTRIBUTING MEMBERS	1,382	1,527	
TOTAL ACTIVE CONTRIBOTING MEMBERS	1,302	1,521	
RETIRED MEMBERS:			
OPEB Plan	9,965	10,104	
TOTAL RETIRED MEMBERS	9,965	10,104	
TERMINATED MEMBERS ENTITLED TO BUT NOT YET RECEIV	ING BENEFITS:		
OPEB Plan	2,937	2,912	
TOTAL TERMINATED MEMBERS ENTITLED TO BUT NOT YET RECEIVING BENEFITS:	2,937	2,912	
	•	·	
INACTIVE MEMBERS:			
Non-Vested Inactive Members	_	_	
TOTAL TERMINATED AND INACTIVE MEMBERS	2,937	2,912	
	=,001	-,	



INVESTMENT section

Investment income has historically provided the majority of the funding for pension benefits. Over the past 25 years, NHRS investments have achieved an average annual return of 8.2 percent.











50 Years of Providing Secure Retirement Benefits and Superior Service



INVESTMENT **CONSULTANT'S LETTER**



KEVIN M. LEONARD SENIOR CONSULTANT

October 9, 2017 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, 2017.

The overall objective of NHRS is to provide service, disability, death and vested retirement benefits, and other postemployment 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. The following pages report on the performance and attributes of the investment program for fiscal year 2017.

Capital markets remained largely driven by a dovish, yet tightening, U.S. Central Bank and international Central Bank stimulative actions, resulting in the continuation of an over eight year valuation expansion of growth assets (equities) in the U.S. Results for U.S. equity investments lagged international investments although both markets ended the year with very strong gains. Anti-establishment political movements globally, the U.S. election outcome, divergent Central Bank policies, historically low and broadly negative real interest rates and concerns over growth in China contributed to higher levels of volatility in the first half of the year. Post U.S. election, volatility around global risk factors were largely shrugged off by markets resulting in U.S. equities posting their eighth consecutive positive year with a +17.9% return as measured by the S&P 500 Index. U.S. high quality fixed income investments produced a negative return (-0.3%), measured by the Bloomberg Barclays U.S. Aggregate Bond Index, driven lower by 10 year U.S. Treasury yields spiking post U.S. election near the end of 2016. International developed markets equities returned +20.3%, as measured by the MSCI EAFE Index, and outperformed domestic equities by 2.4% as European nations returns shrugged off political uncertainty and showed signs of relative economic strength. Emerging markets equities returned +23.7%, as measured by the MSCI Emerging Markets Index, and outperformed U.S. and developed international equities by 5.8% and 3.4% respectively.

For the fiscal year ended June 30, 2017, the NHRS Total Fund returned +13.5% on a net- of-fees basis, outperforming the Total Fund custom benchmark return of +11.9% and ranking in the 18th 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, 2017, the NHRS Total Fund return of +5.8% ranked in the 10th percentile of the universe; For the trailing five years ending June 30, 2017 the NHRS Total Fund return of +9.8% ranked in the 6th percentile of the universe; For the trailing ten year period ending June 30, 2017, the NHRS Total Fund returned +5.7% and ranked in the 16th percentile of the universe; For the trailing twenty-five year period ending June 30, 2017, the NHRS Total Fund returned +8.2%, exceeding the current assumed rate of return of 7.25%, and ranking in the 17th percentile of the universe.

During fiscal year 2017, the Committee continued to implement the expansion of the alternative investment portfolio.

One Main Street | Cambridge, MA 02142 | TEL: 617.374.1300 | www.nepc.com CAMBRIDGE | ATLANTA | CHARLOTTE | DETROIT | LAS VEGAS | SAN FRANCISCO



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 timeweighted return methodology and are reported on a net-of-fees basis.

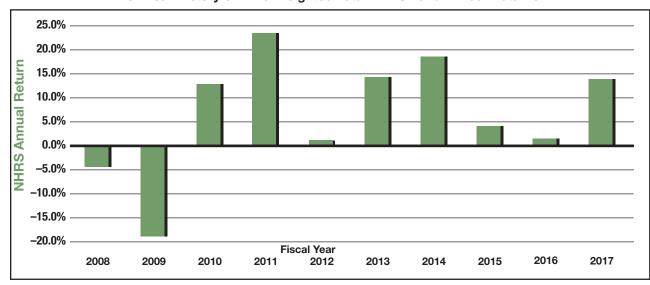
Sincerely,

INVESTMENT REPORTS

	Current Year		Annualized	
	2017	3 Year	5 Year	10 Year
Total NHRS Fund	13.5%	5.8%	9.8%	5.7%
Total Fund Custom Index*	11.9	6.1	9.9	5.9
Domestic Equity	19.3	8.3	14.4	6.5
Total Domestic Equity Blended Benchmark*	17.9	9.6	14.9	7.4
Non-U.S. Equity	20.1	2.3	7.2	2.1
Total Non-U.S. Equity Blended Benchmark*	20.5	0.8	7.2	1.1
Fixed Income	3.9	2.5	3.4	5.8
Total Fixed Income Blended Benchmark*	0.9	2.8	2.7	4.7
Real Estate	9.1	12.0	13.1	5.8
Total Real Estate Blended Benchmark*	6.9	10.4	10.8	6.8
Alternative Investments Total Alternative Investments Blended	11.9	6.4	8.1	1.0
Benchmark*	11.3	9.5	15.7	11.7
Cash Equivalents	0.8	0.3	0.2	0.6
90 Day T-Bills	0.5	0.2	0.2	0.4

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

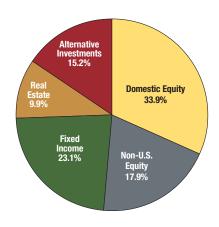
Ten Year History of Time-Weighted Total NHRS Fund Annual Returns



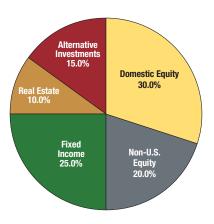
^{*}In a dynamic market, strategies and objectives evolve over time. Consequently, these benchmarks are blended due to historical investment strategy decisions. Detailed descriptions of the benchmarks above are available by contacting NHRS.

	Α	As of June 30, 2017			
	Actual %	Target %	Target Range %		
Domestic Equity	33.9%	30.0%	20 – 50		
Non-U.S. Equity	17.9	20.0	15 – 25		
Fixed Income	23.1	25.0	20 - 30		
Real Estate	9.9	10.0	5 – 20		
Alternative Investments	15.2	15.0	5 – 25		
TOTAL FUND	100.0%	100.0%			

Actual Asset Allocation as of June 30, 2017



Target Asset Allocation as of June 30, 2017



TEN L	TEN LARGEST STOCK HOLDINGS BY FAIR VALUE*		(in thousands)
	Shares	Stock	June 30, 2017 Fair Value
1	283,131	Apple Inc	\$40,777
2	522,252	Microsoft Corp	35,999
3	265,685	Johnson & Johnson	35,147
4	286,430	JPMorgan Chase & Co	26,180
5	298,099	Exxon Mobil Corp	24,065
6	24,454	Amazon.com Inc	23,671
7	656,221	Cisco Systems Inc	20,540
8	21,618	Alphabet Inc	19,645
9	128,360	Facebook Inc	19,380
10	749,925	Bank of America Corp	18,193

TEN	TEN LARGEST FIXED INCOME HOLDINGS BY FAIR VALUE*		(in thousands)
	Par**	Security	June 30, 2017 Fair Value
1	22,850,000	U.S. Treasury Bond — 4.500%, 2036	\$29,494
2	26,507,000	U.S. Treasury Note — 0.750%, 2019	26,147
3	25,618,000	U.S. Treasury Note — 1.125%, 2021	24,919
4	22,288,000	U.S. Treasury Note — 1.625%, 2020	22,358
5	21,373,000	U.S. Treasury Note — 1.875%, 2022	21,400
6	19,939,000	U.S. Treasury Bond — 3.000%, 2045	20,546
7	15,275,000	United Kingdom Gilt Regs — 1.250%, 2018	20,034
8	20,000,000	U.S. Treasury Note — 0.750%, 2018	19,859
9	20,041,000	U.S. Treasury Note — 1.250%, 2021	19,709
10	305,000,000	Mexican Bonos — 7.750%, 2042	17,818

^{*}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

	YE	AR ENDED JUNE 30, 20	17
	Assets Under Management (in thousands)	Fees (in thousands)	Average Basis Points
INVESTMENT MANAGEMENT FEES			
Equity Portfolios:			
Domestic	\$ 2,594,028	\$ 8,669	33
Non-U.S.	1,601,190	8,790	55
Fixed Income Portfolios	1,874,023	4,211	22
Alternative Investments*	1,247,185	· —	_
Real Estate	815,293	1,965	24
Cash and Cash Equivalents**	73,462	_	_
TOTAL INVESTMENT MANAGEMENT FEES	\$ 8,205,181	\$ 23,635	29
INVESTMENT SERVICE FEES			
Custodial Fees	\$ 8,205,181	\$ 614	1
Investment Advisor Fees — External	8,205,181	740	1
Investment Administrative Expenses — Internal	8,205,181	627	1
TOTAL INVESTMENT MANAGEMENT			
AND SERVICE FEES	\$ 8,205,181	\$ 25,616	31

 $[\]ensuremath{^{*}}$ The custodian records all transactions on a net of fee basis.

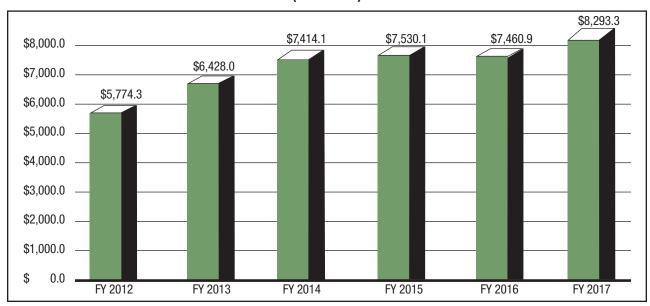
SCHEDULE OF BROKERAGE COMMISSIONS PAID

	YEAR ENDED JUNE 30, 2017			
Brokerage Firm	Number of Shares Traded (in thousands)	Total Commissions (in thousands)	Commissions Per Share	
Goldman Sachs & Company	15,321	\$ 253	0.02	
Merrill Lynch & Company Inc.	10,060	204	0.02	
Pershing LLC	4,540	115	0.03	
National Financial Services	4,452	114	0.03	
J.P. Morgan	4,636	99	0.02	
Credit Suisse	7,995	92	0.01	
Morgan Stanley & Company Inc.	5,317	83	0.02	
UBS Securities/Warburg	6,863	79	0.01	
Stifel Nicolaus	2,006	69	0.03	
Citigroup Global Markets Inc.	4,222	56	0.01	
Deutsche Bank	2,347	52	0.02	
Barclay's Capital Inc.	2,914	51	0.02	
ITG Inc.	3,106	39	0.01	
Jefferies & Company, Inc.	1,189	37	0.03	
Bernstein Sanford C & Co, New York	1,924	33	0.02	
RBC Capital Markets, LLC	1,191	31	0.03	
Instinet, Inc.	2,291	30	0.01	
Baird, Robert W & Co Inc., Milwaukee	832	26	0.03	
Raymond James & Assoc., Inc.	835	25	0.03	
All Others (79 not listed separately)	15,328	294	0.02	
TOTAL BROKERAGE COMMISSIONS PAID	97,369	\$ 1,782	0.02	

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

^{**}Does not include cash and cash equivalents held in manager portfolios, only in designated cash portfolios.

Net Position Held In Trust For Benefits (in millions)



SUMMARY OF INVESTI	4ENITO

	June 30, 2017	
TYPE OF INVESTMENT	Fair Value (in millions)	Percent of Total Fair Value
FIXED INCOME		
Collateralized/Asset Backed Securities	\$ 145.5	1.8%
Corporate Bonds	591.0	7.2%
Government and Agency Bonds	636.5	7.8%
Doubleline Capital Floating Rate Fund	5.2	0.1%
Doubleline Capital Global Bond	2.1	0.0%
GAM	222.5	2.7%
Manulife	211.7	2.6%
TOTAL FIXED INCOME	\$1,814.5	22.1%
EQUITY		
Consumer Discretionary	\$ 484.6	5.9%
Consumer Staples	204.3	2.5%
Energy	180.2	2.2%
Financial Services	757.2	9.2%
Health Care	487.9	5.9%
Producer Durables	452.9 563.4	5.5% 6.9%
Information Technology Materials	173.8	2.1%
Utilities	167.8	2.0%
Aberdeen Emerging Markets Smaller Companies Fund	91.2	1.1%
Russell 2000 Index Fund iShares	8.7	0.1%
Neuberger Berman Emerging Markets Equity Fund	120.2	1.5%
Segall Bryant & Hamill Int'l Small Cap	132.2	1.6%
Wellington Emerging Markets Local Equity Fund	105.6	1.3%
LSV International Value Fund	213.0	2.6%
TOTAL EQUITY	\$4,143.0	50.5%
OTHER INVESTMENTS		
Alternative Investments	\$1,247.2	15.2%
Real Estate	815.3	9.9%
Cash and Cash Equivalents	185.2	2.3%
TOTAL INVESTMENTS	\$8,205.2	100.0%

ACTUARIAL section

NHRS has 47,886 active members, who, along with their participating employers, contribute into the retirement system.













ACTUARIAL CERTIFICATION



800.521.0498 | P: 248.799.9000 | F: .248.799.9020 | www.grsconsulting.com

October 31, 2017

Board of Trustees New Hampshire Retirement System 54 Regional Drive Concord, New Hampshire 03301-8509 Attention: Mr. George Lagos

Dear Board Members:

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report. 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, 2017.
- To provide information in connection with Governmental Accounting Standards Board (GASB) Statement No. 74 "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans" as of June 30, 2017.
- To provide supporting schedules for the Comprehensive Annual Financial Report (CAFR) 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, 2017. 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.

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 Informa-

- Summary of Actuarial Assumptions and Methods
 - Percent Retiring Within Next Year
 - o Probabilities of Becoming Disabled Within Next Year
 - Percent Separating Within Next Year
 - o 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

- Solvency Test
- Schedule of Employer Contributions Pension and OPEB
- Schedule of Changes in the Employers' Net Pension Liability, Net OPEB Liability and Related Ratios
- Sensitivity of Net Pension Liability and Net OPEB Liability to the Single Discount Rate Assumption

The schedules include information regarding pension 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-b, 53-c and 53-d 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 valuations 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, 2017 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, 2017. The actuarial accrued liability as of June 30, 2017 differs from the total pension (OPEB) liability as of June 30, 2017 under GASB Nos. 67 and 74 because the total pension (OPEB) liability is based on a roll-forward of the June 30, 2016 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 Nos. 67 and 74 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 Nos. 67 and 74 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, 2017 accounting report of the NHRS is accurate and fairly presents the actuarial position of the New Hampshire Retirement System as of June 30, 2017 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, and 100-A:53-d.



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, FSA, EA, FCA, MAAA, PhD

Heidi & Barry

avid Thouseh

Heidi G. Barry, ASA, FCA, MAAA DTK/HGB:sc



SUMMARY OF **ACTUARIAL ASSUMPTIONS** AND METHODS

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 character-

- (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 allocated to the pension and medical subsidy plan is 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 rate, 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. 74. 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 7.25% 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%, with a 2.50% price inflation assumption.

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

Pay increase assumptions for individual active members are shown for sample ages on pages 76–80. Part of the assumption for each age is for merit and/or seniority increase, and the other 3.25% recognizes wage inflation, including price inflation, productivity increases, and other macro economic forces.

TECHNICAL ASSUMPTIONS	
Administrative & Investment Expenses	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, 2017 valuation.
Benefit Service	Exact fractional service is used to determine the amount of benefit payable.
COLA	None assumed.
Decrement Operation	Disability and withdrawal do not operate during normal retirement eligibility.
Decrement Timing	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.
Eligibility Testing	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.
Forfeitures	The percent of vested members who quit before retirement who elect to refund and forfeit their pension is assumed to be 25% at first vesting eligibility, grading to 0% at first retirement eligibility.
Incidence of Contributions	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.
Liability Adjustments	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.
Marriage Assumption	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.
Normal Form of Benefit	This valuation assumes that members will elect the normal form of payment. Alternate forms of payment are available and are actuarially adjusted based on the valuation interest and mortality. Group I: The assumed normal form of benefit is a straight life benefit. Group II: The assumed normal form of benefit is straight life for single members and joint and 50% survivor for married members.
Pay Increase Timing	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
New Entrant Profile	For purposes of projecting the normal cost to the beginning of the rate setting biennium, the new entrant profile is based on actual members with 3–8 years of service on the valuation date.
Service Credit Accruals	It is assumed that members accrue one year of service credit per year.
Data Adjustments	For the June 30, 2017 valuation, new active member pays were annualized.
Medical Subsidy	The solvency rate for the medical subsidy benefits were determined to provide an estimated margin of 20% of the benefits payable by June 30, 2017.

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	e of			-
		Withdrawal and Vesting		Death*	Death*		ty**	
Age	Years of Service	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	8.00					
25	5+	7.20	7.20	.05%	.02%	.03%	.02%	
30		7.20	7.20	.05	.03	.03	.02	
35		5.04	7.20	.06	.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	.18	.13	.27	.23	
55		3.60	3.60	.31	.21	.47	.42	
60		3.60	3.60	_	_	_	_	

		Anr	ual Rate of Normal Retirement		
	For Members Hired	Prior to July 1, 2011	For Members Hired O	n or After July 1, 2011	
Age	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	

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	

	MORTALITY RATE		MORTALITY RATE				
AGE	MEN	WOMEN	AGE	MEN	WOMEN		
35	.13%	.13%	60	.89%	.65%		
40	.19	.19	65	1.24	.98		
45	.28	.24	70	1.90	1.56		
50	.43	.32	75	3.10	2.57		
55	.64	.45	80	5.22	4.37		

^{*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.

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:

	Annual Rate of									
		Withdrawal and Vesting		Death*		Disabilit	ty**			
Age	Years of Service	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	.05	.07	.06			
50		2.20	3.30	.16	.09	.17	.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.

		A	nnual Rate of Normal Retirement		
	For Members Hired	Prior to July 1, 2011	For Members Hired Or	or After July 1, 2011	
Age	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	

	MORTALI	TY RATE	MORTALITY RATE				
AGE	MEN	WOMEN	AGE	MEN	WOMEN		
35	.11%	.09%	60	.76%	.46%		
40	.17	.13	65	1.07	.69		
45	.24	.17	70	1.64	1.09		
50	.37	.23	75	2.67	1.81		
55	.52	.32	80	4.50	3.07		

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:

				Annual Rate of				
		Withdrawal and Vesting		Death*	Death*		ty**	
Age	Years of Service	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	.06	.28	.28	
50		2.40	2.40	.15	.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	

	MORTALI	TY RATE		MORTALITY RATE				
AGE	MEN	WOMEN	AGE	MEN	WOMEN			
35	.11%	.11%	60	.76%	.59%			
40	.16	.16	65	1.06	.83			
45	.24	.21	70	1.62	1.33			
50	.37	.28	75	2.64	2.20			
55	.55	.39	80	4.47	3.74			

NORMAL RETIREMENT For Members Hired Prior to For Members Hired on or After July 1, 2011 July 1, 2011 Who Have Vested Status and for Members Hired Prior to July 1, 2011 as of January 1, 2012 Who Have Non-Vested Status as of January 1, 2012 % of Active Members Retiring Within Age 47 Age 48 Retirement Age 46 Age 49 Age 50 with 21 years with 22 years with 23 years with 24 years with 25 years Ages Next Year 22% 45 46 22% 27% 47 22% 27% 31% 22% 25% 31% 34% 48 49 22% 25% 31% 34% 38% 22% 27% 34% 38% 40% 50 25% 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% 22% 58 22% 22% 22% 22% 22% 59 22% 22% 22% 22% 22% 22% 22% 22% 22% 60 22% 22% 22% 22% 20% 20% 20% 20% 20% 61 62 22% 22% 22% 22% 22% 22% 63 22% 22% 22% 22% 22% 22% 20% 20% 20% 20% 20% 20% 64 65 25% 25% 25% 25% 25% 25% 66 50% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50% 67 68 50% 50% 50% 50% 50% 50% 69 50% 50% 50% 50% 50% 50% 100% 100% 70 100% 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:

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

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	

	MORTALI	TY RATE		MORTALITY RATE				
AGE	MEN	WOMEN	AGE	MEN	WOMEN			
35	.11%	.11%	60	.76%	.53%			
40	.17	.16	65	1.07	.80			
45	.24	.20	70	1.64	1.27			
50	.37	.26	75	2.67	2.10			
55	.55	.37	80	4.50	3.56			

NORMAL RETIREMENT For Members Hired Prior to For Members Hired on or After July 1, 2011 July 1, 2011 Who Have Vested Status and for Members Hired Prior to July 1, 2011 as of January 1, 2012 Who Have Non-Vested Status as of January 1, 2012 % of Active Members Retiring Within Retirement Age 46 Age 47 Age 48 Age 49 Age 50 with 25 years with 24 years with 21 years Next Year with 22 years with 23 years Ages 45 12% 46 12% 15% 47 12% 15% 18% 18% 22% 48 12% 15% 49 12% 15% 18% 22% 26% 17% 21% 26% 30% 50 15% 18% 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% 22% 60 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 61 62 28% 28% 28% 28% 28% 28% 63 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 64 65 28% 28% 28% 28% 28% 28% 66 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 28% 67 68 28% 28% 28% 28% 28% 28% 69 28% 28% 28% 28% 28% 28% 100% 100% 100% 100% 70 100% 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	s (ag	(aggregate compensation and annual allowance dollars in thousands)					
ACTIVE MEN	MBERSHIP DATA						
FISCAL YEAR	NUMBER OF ACTIVES***	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION			
2017	24,478	\$1,179,518	\$ 48,187	3.97%			
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%			
2010	25,987	1,093,147	42,065	2.72%			
2009	26,352	1,079,157	40,952	7.47%			
2008	26,507	1,010,032	38,104	7.05%			

RETIRED N	/IEMBERSI	HIP DATA						
	ADDED	TO ROLLS		OVED FROM ROLLS	ROLLS I			
FISCAL YEAR	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES	% INCREASE IN ANNUAL ALLOWANCES	
2017	1,950	\$22,224	519	\$ 8,977	17,573	\$236,377	5.94%	
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%	
2010	1,070	18,300	460	4,624	12,802	156,292	9.59%	
2009	934	14,703	322	3,864	12,192	142,616	8.23%	
2008	1,083	17,897	362	4,199	11,580	131,777	11.60%	

TEACHERS	(ag	(aggregate compensation and annual allowance dollars in thousands)						
ACTIVE MEN	MBERSHIP DATA							
FISCAL YEAR	NUMBER OF ACTIVES***	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION				
2017 2016 2015 2014 2013 2012 2011 2010 2009 2008	17,617 17,784 17,732 17,986 18,084 18,161 18,466 18,603 18,709 18,509	\$1,073,447 1,065,621 1,050,447 1,033,867 1,039,934 1,036,605 1,036,376 1,020,745 1,003,514 957,068	\$ 60,932 59,920 59,240 57,482 57,506 57,079 56,123 54,870 53,638 51,708	1.69% 1.15% 3.06% (0.04%) 0.75% 1.70% 2.28 % 2.30 % 3.73 % 3.59 %				

RETIRED MEMBERSHIP DATA

	ADDED	TO ROLLS		OVED FROM ROLLS	ROLLS I YE			
FISCAL YEAR	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES	% INCREASE IN ANNUAL ALLOWANCES	
2017 2016 2015 2014 2013 2012 2011 2010 2009 2008	1,523 760 840 744 698 712 504 849 1,001	\$21,713 19,954 21,653 17,222 15,844 16,420 10,402 22,231 26,668 23,743	237 209 946 186 247 183 164 269 148 165	\$8,847 5,325 6,891 4,802 5,860 5,150 3,644 5,199 3,214 4,238	12,696 11,410 10,859 10,965 10,407 9,956 9,427 9,087 8,507 7,654	\$276,830 263,964 249,335 234,663 222,243 212,259 200,989 194,231 177,199 153,745	4.87% 5.87% 6.25% 5.59% 4.70% 5.61% 3.48% 9.61% 15.26% 14.53%	

^{*}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.

 $[\]ensuremath{^{***}}\mathsf{Excludes}$ temporary inactive members.

POLICE OFI	FICERS	(aggregate compensation and	l annual allowance dolla	ars in thousands)	
ACTIVE ME	MBERSHIP DATA	4			
FISCAL YEAR	NUMBER OF ACTIVES***	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION	
2017	4,151	\$ 291,004	\$ 70,105	3.42%	
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 %	
2010	4,231	258.472	61.090	2.27 %	
2009	4,318	257.934	59,735	5.92 %	
2008	4,332	244,314	56,398	3.03 %	

RETIRED MEMBERSHIP DATA REMOVED FROM ROLLS ROLLS END OF YEAR ADDED TO ROLLS % INCREASE IN ANNUAL ALLOWANCES ANNUAL** ALLOWANCES (IN DOLLARS) ANNUAL** ALLOWANCES (IN DOLLARS) FISCAL YEAR ANNUAL** ALLOWANCES NO.* NO.* NO.* 2017 233 \$ 7,985 76 \$1,745 3.786 \$135,930 4.81% 239 2016 10,027 67 1,339 3,629 129,690 7.18% 7,303 3,457 282 107 121,002 4.88% 2015 1,675 2014 178 6,420 59 1,304 3,282 115,374 4.64% 8,189 1,464 3,163 110,258 2013 247 65 6.50% 6,977 10,370 103,533 97,564 2012 171 70 1,008 2,981 6.12% 2011 237 59 1,133 2,880 10.46% 7,711 7,235 2010 189 52 1,413 2,702 88,327 7.68% 2,565 82,029 2009 157 28 627 8.76% 10.44% 2008 179 8,504 36 1,376 2,436 75,421

FIREFIGHTE	ERS (a	aggregate compensation and	d annual allowance dolla	ars in thousands)	
ACTIVE MEI	MBERSHIP DATA				
FISCAL YEAR	NUMBER OF ACTIVES***	AGGREGATE COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION	
2017	1,640	\$ 123,643	\$ 75,392	3.23%	
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 %	
2010	1,646	109,020	66,233	1.67 %	
2009	1,653	107,682	65,144	10.25 %	
2008	1,640	96,907	59,090	(3.63)%	

RETIRED MEMBERSHIP DATA

	ADDED	TO ROLLS		VED FROM ROLLS	ROLLS E YE/			
FISCAL YEAR	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES (IN DOLLARS)	NO.*	ANNUAL** ALLOWANCES	% INCREASE IN ANNUAL ALLOWANCES	
2017	88	\$3,697	44	\$1,213	1,639	\$63,976	4.04%	
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%	
2010	53	2,490	36	766	1,254	43,205	4.16%	
2009	60	2,628	23	644	1,237	41,481	5.02%	
2008	63	3,456	31	1,110	1,200	39,497	6.31%	

^{*}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.

 $[\]ensuremath{^{***}}\mathsf{Excludes}$ temporary inactive members.

TOTAL	OF ALL GRO	UPS		(dollars in thousands)				
		Projected Liabilities	For					
Fiscal Year	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*	Net Position Held For Benefits	Lia	ercentage of Accrued bilities Covered By N sition Held for Benefi (2)	et	
2017 2016 2015 2014 2013 2012	\$2,915,811 \$2,978,817 \$2,886,196 \$2,842,340 \$2,808,526 \$2,773,081	\$7,315,440 \$6,964,227 \$3,210,280 \$5,789,052 \$5,519,814 \$5,246,672	\$2,997,199 \$2,789,821 \$1,820,582 \$2,413,782 \$2,380,428 \$2,341,847	\$8,165,685 \$7,636,066 \$4,862,256 \$6,700,553 \$6,070,681 \$5,817,882	100.00% 100.00% 100.00% 100.00% 100.00%	72.00% 67.00% 82.00% 67.00% 59.00% 58.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	

EMPL	OYEES			(dollars in thousands)				
		Projected Liabilities	For					
Fiscal Year	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*	Net Position Held For Benefits	L	Percentage of Accrued Liabilities Covered By Net Position Held for Benefits (2)	(3)	
2017 2016 2015 2014 2013 2012	\$1,133,071 \$1,152,928 \$1,107,866 \$1,083,878 \$1,069,628 \$1,052,106	\$2,272,436 \$2,139,549 \$1,916,257 \$1,823,517 \$1,729,855 \$1.641,026	\$ 934,564 \$ 857,347 \$ 840,426 \$ 784,437 \$ 755,482 \$ 756,255	\$2,734,558 \$2,538,563 \$2,403,294 \$2,195,284 \$1,977,479 \$1,877,395	100.00% 100.00% 100.00% 100.00% 100.00%	70.00% 65.00% 68.00% 61.00% 52.00% 50.00%	0.00% 0.00% 0.00% 0.00% 0.00%	

TEAC	TEACHERS (dollars in thousands)							
		Projected Liabilities	For					
Fiscal Year	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*	Net Position Held For Benefits	Lia	Percentage of Accrued abilities Covered By Ne osition Held for Benefit (2)	et	
2017 2016 2015 2014 2013 2012 2011	\$1,132,876 \$1,171,831 \$1,127,439 \$1,113,650 \$1,107,192 \$1,101,262 \$1,041,699	\$2,819,228 \$2,692,037 \$2,323,302 \$2,198,892 \$2,087,926 \$1,999,152 \$1,893,862	\$1,211,560 \$1,156,821 \$ 988,870 \$ 966,511 \$ 977,937 \$ 949,670 \$ 973,407	\$2,979,005 \$2,799,863 \$2,682,083 \$2,482,496 \$2,255,011 \$2,173,315 \$2,153,182	100.00% 100.00% 100.00% 100.00% 100.00% 100.00%	70.00% 60.00% 67.00% 62.00% 55.00% 50.00%	0.00% 0.00% 0.00% 0.00% 0.00% 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 years prior to 2015 and 7.25% after that.

POLICI	POLICE OFFICERS (dollars in thousands)							
	Р	rojected Liabilities F	or					
Fiscal Year	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*	Net Position Held For Benefits	Lia	ercentage of Accrued bilities Covered By Net sition Held for Benefits (2)	(3)	
2017 2016 2015 2014 2013 2012	\$426,606 \$430,490 \$429,115 \$422,972 \$417,630 \$411,672	\$1,526,761 \$1,460,840 \$1,266,591 \$1,209,741 \$1,160,173 \$1,092,005	\$463,902 \$454,133 \$438,580	\$1,650,908 \$1,546,665 \$1,477,517 \$1,361,280 \$1,236,579 \$1,189,308	100.00% 100.00% 100.00% 100.00% 100.00% 100.00%	80.00% 76.00% 83.00% 78.00% 71.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	

FIREFI	GHTERS			(dollars in thousands)					
	F	Projected Liabilities	For						
Fiscal Year	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members (Employer Financed Portion)*	Net Position Held For Benefits	Lia	ercentage of Accrued bilities Covered By Ne sition Held for Benefit (2)	et		
2017 2016 2015 2014 2013 2012	\$223,258 \$223,568 \$221,776 \$221,840 \$214,076 \$208,041	\$697,015 \$671,801 \$592,362 \$556,902 \$541,860 \$514,489	\$260,320 \$240,428 \$210,708 \$208,701 \$208,430 \$203,805	\$801,214 \$750,975 \$718,867 \$661,493 \$601,612 \$577,864	100.00% 100.00% 100.00% 100.00% 100.00%	83.00% 79.00% 84.00% 79.00% 72.00% 72.00%	0.00% 0.00% 0.00% 0.00% 0.00% 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 years prior to 2015 and 7.25% after that.

ANALYSIS OF PAST FINANCIAL

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 C	OF EMPLOYER	NORMAL	RATE *
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EMPLOYEES							
YEAR ENDED	June (30, 2015	June 3	80, 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)
ACTUAL NORMAL RATE	11.08%	11.08%	10.86%	10.86%	10.44%	10.71%	9.09%

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 İncreases	_	_	_	_	_	.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
ACTUAL NORMAL RATE	15.70%	12.72%	11.96%	11.51%	9.38%	8.93%

^{*}Based on forecast valuations.

6.02

25.33%

6.02

25.33%

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 EMP	LOYER NORM	IAL RATE *						
POLICE OFFICERS								
YEAR ENDED	June	30, 2015	June 3	0, 2013	June 30 2011	June 30 2009	June 30 2007	June 30 2005
	State Police Officers	Political Subdivision Police Officers	State Police Officers	Political Subdivision Police Officers				
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 İncreases	_	_	_	_	_	_	_	(.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	_	_	_	_	_	_	_	_

(0.22)

22.54%

(0.12)

22.54%

4.00

0.73

21.35%

1.47

2.08

.05

18.21%

0.31

0.78

22.92% 17.34%

2.69

FIREFIGHTERS								
YEAR ENDED			June 30	, 2013	June 30 2011	June 30 2009	June 30 2007	June 30 2005
	State Firefighters	Political Subdivision Firefighters	State Firefighters	Political Subdivision Firefighters				
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)
ACTUAL NORMAL RATE	27.79	27.79	25.32%	25.32%	23.79%	28.25%	22.52%	24.49%

^{*}Based on forecast valuations.

Target Rate System Experience

Other Asset (Gains)/Losses

ACTUAL NORMAL RATE

Assumption Changes

SUMMARY OF PRINCIPAL PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

1-GENERAL	N	
Legal Plan Name	New Hampshire Retirement System.	
Effective Date	July 1, 1967.	
Membership	Prospectively, any employee or teacher become of employment. Any employee appointed to term on or after July 1, 2011 will also become as a condition of employment. Membership is appointed for fixed terms, unclassified states to July 1, 2011 or employees of the general of the second	an unclassified position with no fixed e a member of the retirement system s optional for elected officials, officials e employees with no fixed term prio
Average Final Compensation (AFC)	Average annual earnable compensation during ice. For active members who commenced see have non-vested status on or after January compensation during the highest 5 years of the second s	ervice on or after July 1, 2011 or who 1, 2012 — Average annual earnable
NOTE:	A more detailed description of the plan provadministrative office or by visiting www.nhrs	
2-BENEFITS		
GROUP I MEMBERS (EMPLOYEES	AND TEACHERS)	
Service Retirement		
Eligibility	Age 60 years (age 65 for members commend	cing service on or after July 1, 2011)
Amount of Benefit	A member annuity equal to the actuarial equicontributions plus a state annuity.	ivalent of the member's accumulated
	Prior to the member's attainment of age 65 member annuity, shall be equal to 1/60 of AFC of AFC times creditable service for members 1, 2011.)	C multiplied by years of service. (1/66
	After attainment of age 65, the state annuity shall be equal to 1/66 of AFC multiplied by y	
Reduced Service Retirement		
Eligibility	Age plus service of at least 70, provided the rice or age 50 with at least 10 years of service service for members commencing service or	e (age 60 with 30 years of creditable
Amount of Benefit	Service retirement benefit is reduced by the that benefits commence prior to age 60.	e following percents for each month
		Monthly
	Years of Service at Retirement	Percent Reduction
	35 or more	1/8 of 1%
	30–35 25–30	1/4 of 1%
	25–30 20–25	1/3 of 1% 5/12 of 1%
	less than 20	5/9 of 1%
	For members commencing service on or after efit is reduced 1/4 or 1% for each month price	r July 1, 2011, normal retirement ben- or to age 65.
Ordinary Disability Retirement		
Eligibility	10 years of service and permanent disability.	
Amount of Benefit	Service retirement benefit if normal retireme nuity plus a state annuity which together ed	

	number of years of creditable service at the time of disability; provided that the benefit shall not be less than 25% of AFC.
Accidental Disability Retirement	
Eligibility	Permanently disabled due to accident occurring while in the performance of duty.
Amount of Benefit	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.
Ordinary Death Benefit	
Eligibility	Death, other than accidental death.
Amount of Benefit	(a) If 10 years of service or if eligible for service retirement and,
	(i) if survived by a spouse, 50% of the service retirement benefit payable until death or remarriage;
	(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 annu- al compensation.
	(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.
Accidental Death Benefit	
Eligibility	Accidental death occurring while in the performance of duty.
Amount of Benefit	Benefit equal to 50% of AFC.
Vested Deferred Retirement	
Eligibility	10 years of service, if no withdrawal of contributions.
Amount of Benefit	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.
Return of Members' Contributions	
	(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.
	(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 prior to age 60 of a member on deferred vested retirement, the member's accumulated contributions will be paid to the member's beneficia- ry or estate.
	(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.

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 (2) At least 4 years but	24 Years	Age 49	2.1%
less than 6 years (3) At least 6 years but	23 Years	Age 48	2.2%
less than 8 years (4) At least 8 years but	22 Years	Age 47	2.3%
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.

	with the number of years for the supplement adju	isted proportionally.				
Ordinary Death Benefit						
Eligibility	Death other than accidental death.					
Amount of Benefit	(a) If 10 years service or if eligible for service reti	rement and,				
	(i) if survived by a spouse, 50% of the service death or remarriage.	e retirement benefit payable unt				
	(ii) if no surviving spouse or member design spouse, a lump sum equal to the greater compensation.					
	(b) If less than 10 years service and not eligible for equal to the greater of \$3,600 or the member					
Accidental Death Benefit						
Eligibility	Accidental death occurring while in the performa	nce of duty.				
Amount of Benefit	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 receives 50% of the retired member's disability be marriage.					
	Retirement on or after April 1, 1987					
	Benefit payable to surviving spouse until death or member's service, ordinary disability or accidenta if member was married on the date of retirement shall be equal to:	al disability retirement allowance				
	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 Fir	refighter's System					
	Continuance of duty-connected disability benefit member payable until death or remarriage.	s to spouse of deceased retire				
Vested Deferred Retirement						
Eligibility	10 years of service, if no withdrawal of contribution	ons.				
Amount of Benefit	A benefit determined as for service retirement pa be age 45 with 20 years of service or age 60 if ea					

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)

By Members

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.

By Local Employer

For Employee Members

100% of the normal contribution rate for their employees, plus accrued liability contributions, if any.

For Teacher Members

100% of the normal contribution rate for their employees, plus accrued liability contributions, if any.

By the State

For Employee Members

100% of the normal contribution rate for its employees, plus accrued liability contributions, if any.

For Teacher Members

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)

By Members

Firefighters 11.80% of earnable compensation.

Police Officers 11.55% of earnable compensation.

By Local Employer

100% of the normal contribution rate for their employees, plus accrued liability contributions, if any.

By the State 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:

Monthly Amounts

	Pre-65	Post-65
Single	\$375.56	\$236.84
Couple	\$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.

STATISTICAL section

NHRS has 471
participating employers –
the State of New
Hampshire, individual
communities, school
districts, counties, and
other political subdivisions.











50 Years of Providing Secure Retirement Benefits and Superior Service



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 plan 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 both plans for the past ten years
- Schedules of Benefit and Refund Deductions for both plans over the past ten years
- Schedules of Retired Members by Type of Benefit for both plans
- Schedules of Average Benefit Payment Amounts for both plans
- · Schedules of the Principal Participating Employers for both 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 2017 (13.5%), fiscal year 2016 (1.0%), fiscal year 2015 (3.5%), and fiscal year 2014 (17.6%) have offset the losses experienced during the economic crisis and recession of fiscal years 2008–2009. Investment returns were positive overall for the decade and net investment income was able to achieve results above the assumed investment return assumption for that period. In absolute dollars, employer contributions to the pension plan have risen 95% over the decade, member contributions to the pension plan were 35% lower a decade ago. Pension benefits rose 80% 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 decreased slightly in fiscal year 2017. The number of participating employers remains stable.



SCHEDULE OF CHANGES IN NET **P**OSITION

CHANGES IN NET POSITION — PEN	SION	PLAN LAST T	EN FIS	CAL YEARS		
		FY		FY	FY	FY
		2017		2016	2015	2014
Additions:						
Employer Contributions	\$	366,653	\$	357,482	\$ 332,294	\$ 328,444
Member Contributions		213,061		207,949	204,063	199,033
Net Investment Income (Loss)		978,594		61,878	249,806	1,092,585
Net Position Transfers		_		_	_	_
Other		_		_	_	_
Total Additions to Net Position	\$	1,558,308	\$	627,309	\$ 786,163	\$ 1,620,062
Deductions:						
Pension Benefits	\$	706,304	\$	670,360	\$ 631,312	\$ 599,476
Refunds of Contributions		23,408		24,233	26,345	26,120
Administrative Expense		7,671		7,061	7,582	7,377
Professional Fees		992		950	1,318	1,080
Other		263		313	308	366
Total Deductions from Net Position	\$	738,638	\$	702,917	\$ 666,865	\$ 634,419
Change in Net Position	\$	819,670	\$	(75,608)	\$ 119,298	\$ 985,643

CHANGES IN NET POSITION OPEB P	LAN -	- LAST TEN	FISCAL	YEARS		
		FY 2017		FY 2016	FY 2015	FY 2014
Additions:						
Employer Contributions	\$	59,197	\$	58,174	\$ 48,915	\$ 48,881
Net Investment Income (Loss)		4,046		148	1,119	5,381
Net Position Transfers		_		_	_	_
Interest Income		181		778	1,113	1,051
Other		_		_	_	_
Total Additions to Net Position	\$	63,424	\$	59,100	\$ 51,147	\$ 55,313
Deductions:						
Benefits Paid	\$	50,560	\$	51,805	\$ 53,297	\$ 53,811
Net Position Transfers		_		_	· —	_
Administrative Expense		32		17	34	36
Professional Fees		4		2	5	5
Interest Expense		181		778	1,113	1,051
Other		1		1	2	1
Total Deductions from Net Position	\$	50,778	\$	52,603	\$ 54,451	\$ 54,904
Change in Net Position	\$	12,646	\$	6,497	\$ (3,304)	\$ 409

				(in	thousa	nds)		
FY 2013		FY 2012	FY 2011	FY 2010		FY 2009		FY 2008
\$ 249,835 196,489 813,671 — 111	\$	254,557 199,593 19,811 —	\$ 274,582 152,412 1,121,460 — 13,399	\$ 269,677 149,512 546,492 89,505 1,292)	\$ (\$	196,214 142,528 962,057) — 622	\$ (\$	188,197 157,985 284,095) — 1,721
\$ 1,260,106	\$	473,961	\$ 1,561,853	\$ 1,053,894	(\$	622,693)	\$	63,808
\$ 573,469 23,191 6,999 972 818	\$	547,051 26,535 6,261 1,162 50	\$ 519,970 22,830 7,312 1,425 743	\$ 490,075 21,851 6,391 1,205 1,776	\$	452,380 24,204 6,968 1,372 2,331	\$	391,929 32,297 6,691 1,382 1,910
\$ 605,449	\$	581,059	\$ 552,280	\$ 521,298	\$	487,255	\$	434,209
\$ 654,657	(\$	107,098)	\$ 1,009,573	\$ 532,596	(\$	1,109,948)	(\$	370,401)

				(in thou	sands)	
FY 2013	FY 2012	FY 2011	FY 2010	FY 2009		FY 2008
\$ 49,712 4,490 —	\$ 48,964 (164)	\$ 32,901 10,194 —	\$ 32,560 21,777 17,482	\$ 65,236 (33,179) —	\$	61,706 (8,678)
933 —	945 —	_ 122	_ (51)	_ 1,039		- 492
\$ 55,135	\$ 49,745	\$ 43,217	\$ 71,768	\$ 33,096	\$	53,520
\$ 55,146 —	\$ 58,599	\$ 59,863 —	\$ 59,875 89,505	\$ 57,599 —	\$	53,245
1,028 5 933	(23) (33) 945	67 13 — 7	255 48 —	240 47 —		204 42 —
\$ 57,116	\$ (5) 59,483	\$ 59,950	\$ 71 149,754	\$ 1,098 58,984	\$	497 53,988
\$ (1,981)	\$ (9,738)	\$ (16,733)	\$ (77,986)	\$ (25,888)	\$	(468)

SCHEDULE OF BENEFIT AND REFUND **DEDUCTIONS BY TYPE**

		FY 2017		FY 2016	FY 2015	FY 2014
Type of Benefit						
Age and Service Benefits:						
Service Retirement Early Retirement Survivors Vested Deferred Other	\$	425,306 166,373 39,420 27,581 12,066	\$	398,056 162,987 36,989 25,937 11,201	\$ 368,298 159,342 34,572 24,161 10,421	\$ 344,810 156,539 32,444 22,463 9,585
Death in Service Benefit		2,314		2,608	2,430	1,744
Disability Benefits						
Duty Related Non Duty Related Survivors		21,843 9,410 1,991		21,599 9,200 1,783	21,152 9,047 1,889	20,837 9,080 1,974
Total Benefits	\$	706,304	\$	670,360	\$ 631,312	\$ 599,476
Type of Refund Separation Death	\$	19,032 4,376	\$	18,856 5,377	\$ 20,121 6,224	\$ 21,429 4,691
Total Refunds	\$	23,408	\$	24,233	\$ 26,345	\$ 26,120
BENEFIT AND REFUND DEDU LAST TEN FISCAL YEARS	CTIONS	BY TYPE – FY 2017	OPEI	B PLAN FY 2016	FY 2015	FY 2014
OPEB PLAN						
Type of Benefit Medical Subsidy Payments	\$	50,560	\$	51,805	\$ 53,298	\$ 53,145
Total Benefits	\$	50,560	\$	51,805	\$ 53,298	\$ 53,14

			(in tho	usands)	
FY 2013	FY 2012	FY 2011	FY 2010		FY 2009	FY 2008
\$ 325,542 154,821 30,738 20,730 8,800	\$ 308,230 150,023 29,128 19,446 7,826	\$ 287,736 145,483 28,986 19,217 6,803	\$ 270,523 138,643 27,079 18,063 5,882	\$	249,909 125,471 25,160 17,042 5,040	\$ 216,344 101,286 21,961 18,573 5,546
1,719	1,800	1,654	1,326		2,000	2,396
20,674 8,787 1,658	20,374 8,581 1,643	19,769 8,676 1,646	18,682 8,312 1,565		18,043 8,261 1,454	16,869 7,567 1,387
\$ 573,469	\$ 547,051	\$ 519,970	\$ 490,075	\$	452,380	\$ 391,929
\$ 18,133 5,058	\$ 20,299 6,236	\$ 18,362 4,468	\$ 18,580 3,271	\$	20,364 3,840	\$ 29,613 2,684
\$ 23,191	\$ 26,535	\$ 22,830	\$ 21,851	\$	24,204	\$ 32,297

			(in tho	usands)		
FY 2013	FY 2012	FY 2011	FY 2010		FY 2009	FY 2008
\$ 55,145	\$ 58,599	\$ 59,863	\$ 59,978	\$	57,930	\$ 54,035
\$ 55,145	\$ 58,599	\$ 59,863	\$ 59,978	\$	57,930	\$ 54,035

SCHEDULE OF RETIRED AND VESTED MEMBERS BY TYPE OF BENEFIT

			Type of Re	tirement*				
Amount of Monthly Benefit	Number of Retirees	1	2	3	4	5	6	7
EMPLOYEES								
\$1–500 501–1,000 1,001–1,500 1,501–2,000 2,001–2,500 2,501–3,000 3,001–3,500 3,501–4,000 Over 4,000	5,314 5,373 3,197 1,853 1,112 712 466 319 434	4,222 4,075 2,523 1,558 992 650 436 300 417	48 255 86 25 6 6 - 1	2 114 233 95 25 6 4 1	13 10 13 6 - 1 - 2	2 4 2 2 1 -	555 445 169 109 69 41 22 15	474 472 169 58 18 7 4 2
Totals	18,780	15,173	428	482	45	11	1,434	1,207
TEACHERS								
\$1–500 501–1,000 1,001–1,500 1,501–2,000 2,001–2,500 2,501–3,000 3,001–3,500 3,501–4,000 Over 4,000	1,554 2,170 1,936 1,955 1,955 1,538 1,243 701 585	1,213 1,616 1,600 1,738 1,825 1,454 1,190 679 568	1 37 74 28 18 7 3 —	 3 6 8 3 2 	5 56 1 1	- - - 1 - -	78 134 98 94 72 53 42 19	262 378 156 83 31 21 6 2
Totals	13,637	11,883	168	22	17	1	605	941
POLICE OFFICERS								
\$1–500 501–1,000 1,001–1,500 1,501–2,000 2,001–2,500 2,501–3,000 3,001–3,500 3,501–4,000 Over 4,000	222 360 408 349 388 417 385 316 1,056	179 188 188 210 286 286 325 279 987	- 12 23 20 8 1 - 1	- 1 6 32 56 89 44 25 52	- 2 2 1 - 2 1 1	2 - 1 1 1 - 3 - 1	39 147 141 61 23 31 9 8	2 12 47 23 13 10 2 2
Totals	3,901	2,928	66	305	9	9	469	115
FIREFIGHTERS								
\$1–500 501–1,000 1,001–1,500 1,501–2,000 2,001–2,500 2,501–3,000 3,001–3,500 3,501–4,000 Over 4,000	47 107 171 160 171 163 164 141	26 39 66 68 104 126 138 128 507	- 1 8 9 7 1 1	- 5 11 20 24 18 9 15	- 1 - 1 - - -	2 -5 1 3 - 2 1	19 66 78 65 35 11 5 2	- 1 8 6 1 1 - 1

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.

27

102

1,202

1,657

3

291

14

18

Totals

	<u> </u>	<u> </u>	С	ption Selec	ted #	<u> </u>		<u> </u>		
No Option	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Other*
3,030	135	339	127	884	301	13	11			474
2,964	103	365	119	969	359	15	7	_	_	472
1,645	73	276	100	655	270	6	3	_	_	169
919 474	34 12	175 132	74 50	428 312	156 108	6 2	3 4	_	_	58 18
282	16	97	35	189	84	1	1	_	_	7
181	6	80	23	124	47	1	_	_	_	4
111	6	54	19	89	37	1	_	_	_	2
137	5	69	37	118	63	1	1			3
9,743	390	1,587	584	3,768	1,425	46	30			1,207
665	31	105	41	343	97	5	5	_		262
1,114	54	122	34	372	88	6	2	_	_	378
936	47	159	56	447	127	4	4	_	_	156
887 859	51 26	156 158	50	522	196	2	8	_	_	83
644	36 39	137	71 57	565 442	226 193	3 1	6 4	_	_	31 21
521	23	116	49	393	127	2	6	_	_	6
297	18	80	25	186	92	_	1	_	_	2
269	7	70	21	145	71	_	_	_	_	2
6,192	306	1,103	404	3,415	1,217	23	36		_	941
148	1	9	15	22	25					2
263	5	16	10	20	30	2	2	_	_	12
266	10	16	15	16	38	_	_	_	_	47
199	11	8	27	17	64	_	_	_	_	23
189 177	18 22	12 10	51 68	14 15	89 115	_	2	_	_	13 10
133	15	7	96	9	123	_	_	_	_	2
104	8	2	70	8	122	_	_	_	_	2
261	17	11	311	15	435	2	_	_	_	4
1,740	107	91	663	136	1,041	4	4			115
40	_	2		1	4		_			
102 129	_	1	_	1	2	_	_	_	_	1
129	6	7	7	8	6	_	_	_	_	8
115 95	8 10	5 8	8 20	7 7	11 30	_	_	_	_	6
95 60	10 8	4	20 29	9	52	_	_	_	_	1
48	7	3	41	2	63	_	_	_	_	
44	5	2	29	1	59	_	_	_	_	1
142	11	2	139	5	232	1	1			
775	55	34	273	41	459	1	1			18

[#] 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, 2017 **OPEB PLAN**

		One	Person	Two I	Person
Amount of Monthly Benefit	Number of Retirees	Pre 65	Post 65	Pre 65	Post 65
TOTAL — OPEB PLAN					
\$1-500 501-1,000 1,001-1,500 1,501-2,000 Over \$2,000	8,231 1,726 37 11	633 76 4 2	7,468 531 12 1	18 740 11 8	112 379 10 —
Total	10,005	715	8,012	777	501



SCHEDULE OF AVERAGE BENEFIT PAYMENT **A**MOUNTS

SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS PENSION PLAN — EMPLOYEES

2017			Years	Credite	d Service	•		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
Average monthly benefit	\$313	\$453	\$618	\$919	\$1,197	\$1,636	\$2,443	\$1,121
Average annual benefit	\$3,758	\$5,442	\$7,415	\$11,030	\$14,364	\$19,637	\$29,321	\$13,451
Average final average salary	\$43,797	\$42,845	\$41,884	\$47,851	\$50,369	\$56,958	\$66,591	\$50,123
Number of retired members	1,264*	1,779	4,275	2,833	2,793	1,740	2,889	17,573 **

^{*} Includes 310 members who did not have service reported.

^{**} Includes 6,504 members who did not have FAS reported.

2016	2016 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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	Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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	2014 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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	2013 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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	2011 Years Credited Service											
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total				
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.

2010	2010 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total				
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	9							
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
Average monthly benefit	\$314\$30	68 \$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 \$30	6,237\$35,9	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.

SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS PENSION PLAN — TEACHERS

2017	Years Credited Service								
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total	
Average monthly benefit	\$504	\$573	\$733	\$1,140	\$1,502	\$1,927	\$2,765	\$1,817	
Average annual benefit	\$6,051	\$6,870	\$8,799	\$13,679	\$18,018	\$23,127	\$33,176	\$21,804	
Average final average salary	\$52,263	\$57,449	\$50,750	\$59,866	\$63,691	\$68,520	\$72,099	\$65,211	
Number of retired members	292*	360	1,556	1,557	2,437	2,165	4,329	12,696 **	

^{*} Includes 135 members who did not have service reported.

^{**} Includes 4,808 members who did not have FAS reported.

2016 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total		
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	2015 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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.

 $^{^{\}star\star}$ Includes 4,203 members who did not have FAS reported.

2014											
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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.

 $^{^{\}star\star}$ Includes 4,974 members who did not have FAS reported.

2013	2013 Years Credited Service											
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total				
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	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total		
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.

2010 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total		
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			Years	Credite	d Service	9		
Service	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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			Years	Credite	d Service	Э		
Service	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
Average monthly benefit	\$418\$4	57 \$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\$5	3,161\$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.

SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS PENSION PLAN - POLICE OFFICERS

2017			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
Average monthly benefit	\$979	\$1,368	\$1,623	\$2,230	\$3,135	\$4,611	\$6,184	\$2,992
Average annual benefit	\$11,744	\$16,412	\$19,473	\$26,759	\$37,625	\$55,333	\$74,205	\$35,903
Average final average salary	\$52,922	\$56,688	\$55,024	\$66,556	\$81,206	\$95,886	\$108,399	\$79,145
Number of retired members	404*	206	437	354	1,499	653	233	3,786 **

^{*} Includes 263 members who did not have service reported.

^{**} Includes 1,801 members who did not have FAS reported.

2016 Years Credited Service									
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total	
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			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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			Years	Credite	d Service	Э		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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.

 $^{^{\}star\star}$ Includes 1,816 members who did not have FAS reported.

2013			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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	2012 Years Credited Service											
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total				
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	2011 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
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.

2010 Years Credited Service									
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total	
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			Years	Credite	d Service	9		
Service	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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 Years Credited Service									
Service	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total	
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\$5	0,113\$45,0	63\$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.

SCHEDULE OF AVERAGE BENEFIT PAYMENT AMOUNTS PENSION PLAN - FIREFIGHTERS

2017	17 Years Credited Service										
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total			
Average monthly benefit	\$1,154	\$1,407	\$1,830	\$2,189	\$2,788	\$4,165	\$6,055	\$3,253			
Average annual benefit	\$13,843	\$16,879	\$21,957	\$26,625	\$33,456	\$49,985	\$72,654	\$39,033			
Average final average salary	\$55,226	\$59,323	\$61,155	\$69,692	\$79,089	\$91,311	\$101,821	\$85,145			
Number of retired members	150*	31	96	129	625	406	202	1,639**			

^{*} Includes 131 members who did not have service reported.

^{**} Includes 931 members who did not have FAS reported.

2016			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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.

 $^{^{\}star\star}$ Includes 949 members who did not have FAS reported.

2014			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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			Years	Credite	d Service)		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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.

 $^{^{\}star\star}$ Includes 931 members who did not have FAS reported.

2011			Years	Credite	d Service	9		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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.

2010			Years	Credite	d Service	Э		
Service	0–4. yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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			Years	Credite	d Service)		
Service	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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			Years	Credite	d Service)		
Service	0–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–29 yrs.	30 or more yrs.	Total
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\$4	2,455\$46,3	01\$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.

SCHEDULES OF AVERAGE BENEFIT PAYMENT AMOUNTS -	– OPEB PLAN	l .	
	2017 Service	0-4 yrs**	5-9 yrs
Average Monthly Benefit Annual Benefits Number of retired members **Includes 48 members who did not have service reported		\$360 \$756,048 175	\$383 \$702,293 153
	2016 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefits Number of retired members **Includes 44 members who did not have service reported		\$366 \$776,997 177	\$393 \$749,533 159
	2015 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefits Number of retired members **Includes 43 members who did not have service reported		\$373 \$805,749 180	\$392 \$789,827 168
	2014 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefits Number of retired members **Includes 35 members who did not have service reported		\$415 \$811,354 163	\$424 \$804,819 158
	2013 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefits Number of retired members **Includes 37 members who did not have service reported		\$433 \$941,225 181	\$448 \$934,509 174
	2012 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefits Number of retired members **Includes 94 members who did not have service reported	\$-	\$395 1,074,690 227	\$446 \$904,456 169
	2011 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefits Number of retired members **Includes 103 members who did not have service reported	\$	\$406 1,158,273 238	\$451 \$941,454 174
	2010 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefits Number of retired members **Includes 108 members who did not have service reported	\$	\$415 1,226,420 246	\$467 \$964,536 172
	2009 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefit Number of retired members **Includes 116 members who did not have service reported	\$-	\$413 1,269,340 256	\$478 \$987,552 172
	2008 Service	0–4 yrs.**	5–9 yrs.
Average Monthly Benefit Annual Benefit Number of retired members **Includes 132 members who did not have service reported	\$-	\$406 1,311,656 269	\$480 \$985,767 171

		2017			
Total	30 or more yrs	25-29 yrs	20-24 yrs	15-19 yrs	10-14 yrs
\$413 \$49,635,957	\$420 \$18,677,378	\$420 \$11,095,969	\$407 \$16,063,911	\$406 \$1,076,033	\$405 \$1,264,225
10,005	3,703	2,204	3,289	221	260
,	,	,	,		
Total	30 or more yrs.	2016 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$419	\$430	\$423	\$411	\$410	\$408
\$51,117,645	\$19,325,316	\$11,351,956	\$16,480,299	\$1,131,240	\$1,302,304
10,160	3,746	2,237	3,345	230	266
Total	30 or more yrs.	2015 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$424	\$436	\$425	\$415	\$416	\$426
\$52,249,828	\$19,732,252	\$11,528,248	\$16,906,473	\$1,112,003	\$1,375,276
10,265	3,770	2,259	3,396	223	269
Total	30 or more yrs.	2014 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$438	\$451	\$434	\$427	\$424	\$442
\$53,789,382	\$20,711,693	\$11,720,646	\$17,210,363	\$1,103,825	\$1,426,682
10,243	3,824	2,252	3,360	217	269
Total	30 or more yrs.	2013 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$448	\$467	\$440	\$434	\$428	\$446
\$55,189,609	\$21,523,385	\$11,824,268	\$17,352,821	\$1,124,533	\$1,488,868
10,264	3,839	2,241	3,332	219	278
Total	30 or more yrs.	2012 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$458	\$481	\$446	\$445	\$438	\$449
\$57,444,634	\$22,532,887	\$12,107,889	\$18,133,415	\$1,181,439	\$1,509,858
10,461	3,902	2,264	3,394	225	280
Total	30 or more yrs.	2011 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$470	\$497	\$456	\$457	\$445	\$458
\$59,696,854	\$23,543,318	\$12,433,418	\$18,843,776	\$1,221,548	\$1,555,067
10,577	3,946	2,273	3,434	229	283
Total	30 or more yrs.	2010 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$476	\$503	\$461	\$463	\$450	\$464
\$60,560,973	\$24,025,062	\$12,510,895	\$18,996,737	\$1,229,834	\$1,607,489
10,592	3,977	2,264	3,416	228	289
Total	30 or more yrs.	2009 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$475	\$499	\$459	\$464	\$456	\$469
\$58,180,112	\$22,354,408	\$12,131,928	\$18,526,187	\$1,257,711	\$1,652,986
10,209	3,731	2,202	3,324	230	294
Total	30 or more yrs.	2008 25–29 yrs.	20–24 yrs.	15–19 yrs.	10–14 yrs.
\$471	\$491	\$459	\$463	\$458	\$473
\$54,158,154 9,584	\$20,168,567 3,425	\$11,340,174 2,058	\$17,462,097 3,145	\$1,236,512 225	\$1,653,381 291

PRINCIPAL PARTICIPATING EMPLOYERS

PRINCIPAL PARTICIPATING EMPLOYERS — PENSION PLAN CURRENT YEAR AND NINE YEARS AGO

	As Of June 30, 2017			As Of June 30, 2008		
	# of Covered		Percentage of Total	# of Covered		Percentage of Total
Participating Government	Employees	Rank	Pension Plan	Employees	Rank	Pension Plan
State of New Hampshire	10,776	1	22.50%	12,245	1	24.28%
SAU 42 (Nashua School District)	1,281	2	2.68%	1,341	3	2.66%
Manchester School District	1,252	3	2.61%	1,428	2	2.83%
Timberlane School District	652	4	1.36%	660	4	1.31%
City of Dover	633	5	1.32%	_	_	_
City of Nashua	618	6	1.29%	587	9	1.16%
Merrimack School District	608	7	1.27%	654	5	1.30%
Concord School District	577	8	1.20%	607	6	1.20%
SAU 54 (Rochester School District)	575	9	1.20%	588	8	1.17%
Merrimack County	563	10	1.18%	583	10	1.16%
All Other*	30,351		63.39%	31,727		62.93%
Total (471 Governments)	47,886		100.00%	50,420		100.00%
*As of June 30, 2017, "All Other" consisted of:				Number		Employees
Type						Employees
City Governments				11		2,392 5,571
Town Governments & Related Entities				244		5,571
County Governments & Related Entities				11		2,666
School Districts & School Administrative Units				195		19,722
Total				461		30,351

PRINCIPAL PARTICIPATING EMPLOYERS - OPEB PLAN CURRENT YEAR AND NINE YEARS AGO

	As Of June 30, 2017			As Of June 30, 2008		
	# of Covered		Percentage of Total	# of Covered		Percentage of Total
Participating Government	Employees	Rank	OPEB Plan	Employees	Rank	OPEB Plan
State of New Hampshire	2,511	1	25.10%	2,970	1	30.99%
Manchester School District	486	2	4.86%	467	2	4.87%
SAU 42 (Nashua School District)	406	3	4.06%	322	3	3.36%
City of Nashua	300	4	3.00%	262	5	2.73%
City of Manchester	299	5	2.99%	315	4	3.29%
Concord School District	211	6	2.11%	209	6	2.18%
City of Concord	189	7	1.89%	190	7	1.98%
Keene School District	182	8	1.82%	170	8	1.77%
Portsmouth School District	148	9	1.48%	157	9	1.64%
Town of Salem	130	10	1.30%	117	10	1.22%
All Other*	5,143		51.39%	4,406		45.97%
Total (145 Governments)	10,005		100.00%	9,585		100.00%
*As of June 30, 2017, "All Other" consisted of:						
Туре				Number		Employees
City Governments				13		597
Town Governments & Related Entities				132		863
County Governments & Related Entities				12		302
School Districts & School Administrative Units				191		3,381
Total				348		5,143

A full list of participating employers as of June 30, 2017 begins on page 117.

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LISTING OF PARTICIPATING EMPLOYERS

STATE GOVERNMENTBristol E, P, FEpping E, P, FState of New Hampshire E, P, FBrookline E, P, FEpsom E, P, FCommunity College System of New Hampshire EBrookline Public Library EExeter E, P, F

Campton E, P

Community Development Finance
Authority E

Campton E, P

Campton-Thornton Fire
Department E, F

Farmington P, F

Fitzwilliam E, P

Francestown E, P

Investment Program E

New Hampshire Retirement System E

Pease Development Authority E

Canaan E, P

Candia P

Candia P

Canterbury E, P

Carroll E, P, F

CITIES AND TOWNS (AND RELATED ENTITIES)

Albany E

Center Conway Fire Precinct F

Center Harbor P

Center Harbor P

Central Hooksett Water Precinct E

Gilford E, P, F

Gilmanton E, P, F

Goffstown E, P, F

Alexandria E, P
Charlestown E, P
Goffstown Village Water Precinct E

Allenstown E, P, F Chester E, P, F Gorham E, P, F Alstead P Chesterfield E, P Goshen E Alton E, P Chichester E, P Grafton E, P Amherst P, F Claremont E, P, F Grantham E, P Andover P Clarksville E Greenfield E, P Androscoggin Valley Regional Refuse Colebrook E, P

Disposal Dist. E

Antrim E, P

Ashland E, P

Concord E, P, F

Concord Regional Solid Waste Resource Recovery Facility E

Greenville E, P

Greenville E, P

Groton E, P

Ashland Electric Department E Conway E, P Hampstead E, P, F

Atkinson E, P Conway Village Fire District E, F Hampton E, P, F

Auburn E, P, F

Cook Memorial Library E

Hampton Falls E, P, F

Baker Free Library E

Cornish E

Danville P

Barrington E, P, F

Barrllett P, F

Barrllett P, F

Deering P

Deerry E, P, F

Hancock P

Hanover E, P, F

Harrisville P

Haverhill E, P

Hebron E, P

Bedford E, P, F

Derry Housing Authority E

Henniker E, P, F

Belmont E, P, F

Dorchester E

Dover E, T, P, F

Hillsborough P, F

Berlin E, P, E

Dover Housing Authority E

Holderness E, P

Berlin E, P, FDover Housing Authority EHolderness E, PBerlin Housing Authority EDublin E, PHollis E, P, FBerlin Water Works EDunbarton E, PHooksett E, P, F

Bethlehem E, P, FDurham E, P, FHooksett Public Library EBoscawen E, PEast Kingston E, PHooksett Sewer Commission EBow E, P, FEffingham PHooksett Village Water Precinct E

Bradford P Eidelweiss Village District E Hopkinton E, P, F
Brentwood E, P, F Enfield E, P Hudson E, P, F

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

Plainfield E, P

Thornton E, P

Thornton Public Library E Merrimack County E, P Errol School District T Tilton E. P Rockingham County E, P Exeter School District E, T Tilton/Northfield Fire District E, F Strafford County E, P Exeter Regional Co-Op School District E, T Troy E, P Sullivan County E, P Fall Mountain Regional School Troy Water & Sewer E District E, T Tuftonboro E, P, F **SCHOOL DISTRICTS** Farmington School District E, T Unity E Allenstown School District T Franklin School District E. T. Village District of Eastman E Alton School District E, T Freedom School District E. T Wakefield E, P, F Amherst School District E, T Fremont School District E, T Walpole E, P Andover School District E, T Gilford School District E, T Warner E, P Ashland School District E, T Gilmanton School District E, T Warner Village Water District E Auburn School District E. T. Goffstown School District E, T Warren P Barnstead School District E, T Governor Wentworth Regional School District E, T Washington E, P Barrington School District E, T Grantham School District E, T Waterville Estates Village District E Bartlett School District E. T. Great Bay eLearning Charter Waterville Valley E, P, F Bath School District E, T School T Weare E, P Bedford School District E, T Greenland School District E, T Webster E, P Bethlehem School District E, T **GRS Cooperative School** Weeks Public Library E Bow School District E, T District E, T Westmoreland E Brentwood School District E. T Hampstead School District E, T Whitefield E. P. F. Brookline School District E. T Hampton Falls School District E. T Wilmot E, P Campton School District E, T Hampton School District E, T Wilton P Candia School District E, T Hanover School District E, T Winchester E, P Chester School District E, T Harrisville School District E, T Windham E, P, F Chesterfield School District T Haverhill Coop School Wolfeboro E, P, F Chichester School District E, T District E, T Woodstock E. P. Claremont School District E. T Henniker School District E, T Woodsville Fire District E Cocheco Arts & Technology Hill School District E, T Academy T Woodsville Water & Light Hillsboro-Deering School District E, T Department E Colebrook School District T Hinsdale School District E, T Concord School District E, T Holderness School District E, T **COUNTY GOVERNMENTS** Contoocook Valley Regional (AND RELATED ENTITIES) School District E, T Hollis School District E, T Belknap County E, P Conway School District E, T Hollis/Brookline Coop School District E, T Belknap County Conservation Cornish School District E, T District E Hooksett School District E, T Croydon School District T Carroll County E, P Hopkinton School District E, T Deerfield School District T Cheshire County E, P Hudson School District E, T Dresden School District E. T Coos County E, P Inter-Lakes School District E, T Dunbarton School District T Coos County Nursing Home E Jackson School District E, T East Kingston School District E, T Grafton County E, P Jaffrey-Rindge Coop School Epping School District E, T District E, T

Epsom School District T

Hillsborough County E, P

John Stark Regional School Newington School District E, T Strafford School District E, T District E, T Newmarket School District E, T Stratford School District E, T Kearsarge Regional Cooperative Newport School District E, T Stratham School District E, T School District E, T Next Charter School T Sunapee School District E, T Keene School District E, T North Country Charter Academy T Tamworth School District E, T Kensington School District E, T Thornton School District E, T North Country Education Service E, T Laconia School District E, T North Hampton School District E, T Timberlane Regional School Lafayette Regional Cooperative District E, T School District E, T Northumberland School District E, T Unity School District E, T Landaff School District T Northwood School District E, T Virtual Learning Academy Lebanon School District E, T Nottingham School District E, T Charter School T Lempster School District E, T Oyster River Coop School District E, T Wakefield School District E, T Lincoln Woodstock Coop Pelham School District E, T Warren School District E, T School District E, T Pembroke School District E, T Washington School District E, T Lisbon Regional School District E, T Pemi-Baker Regional School Waterville Valley School District E, T Litchfield School District E, T District E, T Weare School District T Littleton School District E, T Piermont School District E, T Wentworth School District E, T Londonderry School District E, T Pittsburg School District E, T Westmoreland School District E, T Lyme School District E, T Pittsfield School District E, T White Mountains Regional Madison School District E, T Plainfield School District E, T School District E, T Manchester School District E, T Plymouth School District E, T Wilton-Lyndeborough Marlborough School District E, T School District E, T Portsmouth School District E, T Marlow School District E, T Winchester School District E, T Portsmouth - Josie F. Prescott E Mascenic Regional School Windham School District E, T Profile Coop School District E, T District E, T Winnacunnet Coop School Propsect Mountain High School E, T Mascoma Valley School District E, T District E, T Raymond School District E, T Mason School District E, T Winnisquam Regional School Rivendell Interstate School District E, T Merrimack School District E, T District T Merrimack Valley School Rollinsford School District E, T District E, T **SCHOOL ADMINISTRATIVE** Rumney School District E, T **UNITS** Middleton School District E, T Rye School District E, T SAU 2 E Milan School District E, T Salem School District E, T SAU 3 E, T Milford School District E, T Sanborn Regional School SAU 6 E Milton School District E, T District E, T SAU 7 E, T Monadnock Regional School Seabrook School District E, T District E, T SAU 9 E, T Seacoast Charter School T Monroe School District E, T SAU 10 E, T Shaker Regional School District E, T Mont Vernon School District E, T SAU 13 E, T Somersworth School District E, T Moultonborough School District E, T SAU 15 E Souhegan Cooperative School Nelson School District T SAU 16 E, T District E, T New Boston School District T SAU 18 E, T South Hampton School District E, T New Castle School District E, T SAU 19 E, T Stark School District E. T Newfields School District E, T SAU 20 E Stewartstown School District T **SAU 21 E** Newfound Area School District E. T.

Stoddard School District E, T

- SAU 23 E, T
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