

# ERFC

TWENTY FIFTEEN

Comprehensive Financial Annual Report



For the Fiscal Year  
Ended June 30, 2015

The Educational Employees'  
Supplementary  
Retirement System  
of Fairfax County

A Component Unit  
of Fairfax County  
Public Schools

Fairfax, Virginia



TWO SCHOOLS - ONE FAMILY

## ACHIEVEMENTS

### CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

This plaque was awarded to the ERFC for excellence in financial reporting for their presentation of the fiscal year *2014 Comprehensive Annual Financial Report*.

This is the highest form of recognition in the area of public employee retirement system accounting and financial reporting. It is a prestigious national award recognizing excellence and represents a significant achievement by the school system.

The award reflects the commitment of the ERFC Board of Trustees, School Board, and ERFC staff to achieve and maintain the highest standards of financial reporting.



# 2015 ERFC

## COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2015  
The Educational Employees' Supplementary  
Retirement System of Fairfax County

A Component Unit of the  
Fairfax County Public Schools, Fairfax, Virginia

### BOARD OF TRUSTEES

**Michael Hairston**, Chairperson and Trustee  
**Nancy Hammerer**, Vice Chairperson and Trustee  
**Susan Quinn**, Treasurer and Trustee  
**Michael Burke**, Trustee  
**Leonard Bumbaca**, Trustee  
**Steven Lockard**, Trustee  
**Kristen Michael**, Trustee

### ADMINISTRATION

**Jeanne Carr**, Executive Director and CIO  
**Michael Lunter**, Finance Coordinator

### PREPARED BY

ERFC Staff  
8001 Forbes Place, Suite 300  
Springfield, VA 22151-2205

### DESIGNED BY

Fairfax County Public Schools  
Information Technology  
Multimedia Design



## MISSION STATEMENT AND PRINCIPLES



The mission of the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC) is to enhance the financial security of our members through prudent financial stewardship of a defined benefit plan while providing outstanding retirement services and education.

### ERFC SLOGAN

ERFC: Enter Retirement Feeling Confident

### ERFC VISION

To be a leader among our peers in providing professional and personalized service to our members and beneficiaries.

### ERFC VALUES

#### *Accountability*

Operate with transparency and a commitment to think strategically while fulfilling fiduciary obligations.

#### *Customer Service*

Respond promptly with quality as we strive to exceed the expectations of our membership.

#### *Open Communication*

Provide timely and pertinent information that improves processes, removes barriers, and establishes accountabilities.

#### *Integrity*

Conduct operations by adhering to the highest standards of ethical conduct.

#### *Continuous Improvement*

Enable employees to grow and succeed through appropriate education.

### PRUDENT MANAGEMENT

#### *Adequate Funding*

To maintain adequate funding of all promised benefits, and to ensure the financial integrity of the System.

#### *Prudent Investments*

To adopt comprehensive objectives, methods for evaluation of performance, and policies that ensure the highest possible investment return consistent with the prudent investment of plan assets.

#### *Actuarial Studies*

To have an annual actuarial valuation performed by an enrolled actuary in accordance with actuarial standards and to implement an actuarial experience study at least every five years.

#### *Annual Reports*

To keep, as part of the public record, annual financial, actuarial, and investment information that will be available for members and elected officers.

#### *Financial Audits*

To prepare an annual financial statement in accordance with generally accepted accounting principles, and to implement an annual audit of the System's financial statement in accordance with generally accepted auditing standards.

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## ACHIEVEMENTS

### PUBLIC PENSION STANDARDS AWARD

This award has been presented to ERFC in recognition of instituting professional standards for public employee retirement systems as established by the Public Pension Coordinating Council. This award represents an exceptionally high level of administration and reporting in the public pension industry.



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2015***

Presented to

***The Educational Employees' Supplementary Retirement  
System of Fairfax County (ERFC)***

In recognition of meeting professional standards for  
plan funding and administration as  
set forth in the Public Pension Standards.

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink, reading 'Alan H. Winkle'.

Alan H. Winkle  
Program Administrator

# INTRODUCTION (UNAUDITED)

Tucked away in the Springfield community of Kings Park are sister elementary schools that live by the motto, "Two Schools, One Family." Built in 1964, Kings Park Elementary was established for all elementary students in the neighborhood, however, the growing needs of the community over the next five years warranted a second school and Kings Glen was established in 1969. Instead of creating two schools serving grades K-6, students attend Kings Park for grades K-3 then head down the street to complete grades 4-6 at Kings Glen. The concept of sister schools has allowed students to remain together within their grade levels and created unique learning opportunities that have ignited students for 50 years in Fairfax County Public School's oldest split elementary school.



EDUCATION IS NOT PREPARATION FOR LIFE; EDUCATION IS LIFE ITSELF. JOHN DEWEY

## LETTER OF TRANSMITTAL



8001 Forbes Place, Suite 300  
Springfield, VA 22151

November 9, 2015

The Board of Trustees  
Educational Employees' Supplementary Retirement System of Fairfax County (ERFC)  
Springfield, VA

**Dear Chairperson and Members of the Board of Trustees,**

It is our privilege to submit the Comprehensive Annual Financial Report (CAFR) for the Educational Employees' Supplementary Retirement System of Fairfax County ("ERFC" or "System") for the fiscal year ended June 30, 2015. The ERFC management holds responsibility for the financial information presented in this report. Proper internal accounting controls exist to provide reasonable, but not absolute, assurance for both the safekeeping of assets and the fair presentation of the financial statements. The concept of reasonable assurance recognizes that the costs of controls should not exceed the anticipated benefits these controls provide. This CAFR reflects the careful stewardship of the System's assets and dedicated service provided by the Board and staff. For financial reporting purposes, the ERFC is considered a component unit of the Fairfax County Public Schools, Fairfax County, Virginia. As such, this report is designed to comply with the reporting requirements of Sections 3-4-6(a)(8) of the Fairfax County Code and the Virginia Code. We believe this report also conforms to the Government Finance Officers Association's (GFOA) requirements.

The following provides a summary of the System's historical background, and outlines significant achievements for the Board and management during the fiscal year. A management discussion and analysis (MD&A) narrative is also provided in the Finance Section, immediately following the independent auditors' report.

**Plan History**

The ERFC was established on July 1, 1973, through negotiations conducted between the Fairfax County School Board and the Fairfax Education Association (FEA). The terms under which ERFC operates were later incorporated in a Fairfax County ordinance and the ERFC Plan Document. Historically, ERFC benefits have been designed specifically to supplement the benefits of two primary retirement plans: the Virginia Retirement System (VRS) and the federal Social Security System. In 1987, the VRS introduced major increases to the state's early retirement benefits, which required the ERFC to thoroughly re-examine the complementary structure of its supplemental benefits plan. Effective July 1, 1988, the ERFC significantly altered its Legacy Plan benefit structure in order to rebalance the benefit amounts payable to future ERFC members, while also maintaining and protecting the rights of current members. Thirteen years later, the School Board approved further refinements to the



## LETTER OF TRANSMITTAL

ERFC supplemental retirement program with the introduction of a second retirement plan, ERFC 2001, a streamlined and stand-alone retirement plan structure provided to all eligible FCPS employees hired on or after July 1, 2001. With prudent management oversight and sustained support from the School Board, the ERFC Legacy and ERFC 2001 plans continue to provide a valuable and secure defined benefit retirement program for over 20,000 full-time educational, administrative and support employees of Fairfax County Public Schools (FCPS).

### **Administration and Technology Updates**

Communication activities to increase the understanding and appreciation of the value of ERFC and the total retirement program received increased emphasis during the fiscal year. As part of its School Outreach program, ERFC staff visited 18 schools, explaining to members the provisions and importance of their retirement benefits. ERFC staff also presented to the employee groups, Office Personnel Advisory Council (OPAC) and Support Services Employee's Advisory Council (SSEAC). ERFC established a new position, Retirement Communications Representative, to assist with the increased communications program.

The ERFC staff continued its efforts to implement technology innovations that will result in improved efficiencies and/or cost savings. As part of its "ERFC Going Paperless" campaign, ERFC began distributing its Leaving FCPS Employment Before Retirement information through ERFCDirect, ERFC's online member service. Over 18,000 active members and retired members now use ERFCDirect, up from 15,000 a year ago. For the first time, the Annual Financial Summaries were emailed to retirees and deferred vested members where email addresses were available, saving printing and postage costs.

### **Strategic Plan**

The ERFC staff successfully completed the remaining action items included in the 2013 Strategic Plan during the fiscal year. Action plans completed under the Communications Section included development of a "Now you're vested!" communications program to congratulate newly vested members and advise them to take actions to establish a beneficiary, review benefit account information and attend the annual ERFC seminar. Under the ERFC Services and Internal Management Section, KPMG was retained to conduct an internal control audit of ERFC. KPMG completed its fieldwork testing activities in May and is scheduled to present its results to the Board in December.

The Board of Trustees adopted its 2015 Strategic Plan in July. The new Plan continued the Board's theme in recent years of emphasizing communication, education and advocacy. Action Plans included in the three-year Plan involved creating a broad-based communications plan that emphasizes ERFC's value, developing an ERFC 2025 profile which forecasts membership data and portfolio growth, determining the economic flow-through of ERFC retirement benefits, and researching successful "ambassador programs" created by peer retirement systems.

## LETTER OF TRANSMITTAL

### **Plan Financial Condition**

The ERFC achieved a 2.0 percent return for fiscal year 2015, ending the double-digit return streak of the prior two fiscal years. For the year, ERFC exceeded its policy index by .9 percent due to strong returns by its domestic equity managers and outperformance by its real estate portfolio.

ERFC's independent actuary reported that the System's funding ratio increased from 76.7 percent to 77.7 percent for the valuation period ending December 31, 2014, due to lower than anticipated pay increases and favorable demographic experience. The recommended employer contribution rate remained unchanged at 5.60 percent of payroll for fiscal year 2016.

The Financial, Actuarial, and Statistical sections of this report provide detailed information regarding the Fund's overall financial condition. In addition, the Required Supplementary Information, included in the Financial Section, presents historical data to help in assessment of the System's funding status.

### **Investment Activity**

The ERFC's 2.0 percent return for FY 2015 outperformed its benchmark index but underperformed its peer systems for the fiscal year with the median fund returning 3.2 percent. This peer system underperformance occurred due to less domestic equity exposure in ERFC's portfolio than its peer group along with domestic equity being the best performing sector during the fiscal year. Also, the international equity markets – both developed and emerging markets – declined sharply and ERFC's higher than peer allocation to global asset allocations contributed to ERFC's lower than peer rankings. The Fund's longer-term return remained strong with the 10-year return of 6.7 percent exceeding the peer median.

The Board continued implementation of its private equity program during the fiscal year. It committed \$7.5 million to the Permal Private Equity Opportunities Fund V and \$55 million to HarbourVest Partners Fund X. The increased volatility in the markets that occurred subsequent to fiscal year-end further strengthened the Board's belief that it will best meet its long-term investment objectives by adding further diversification in the portfolio. The Investment Section of this report provides additional details regarding the Fund's activities and performance.

### **Professional Services**

The ERFC Board of Trustees appoints professional services to aid in the efficient management of the System. New England Pension Consultants (NEPC), based in Boston, Massachusetts, provides investment consulting services, and Gabriel, Roeder, Smith & Company, of Southfield, Michigan, provides actuarial services. In accordance with county code, the Fairfax County Board of Supervisors appointed KPMG LLP, Certified Public Accountants, Washington, D.C., to audit the System's financial statements.

## LETTER OF TRANSMITTAL

### Awards

The System proudly announces that the Government Finance Officers Association of the United States and Canada (GFOA) awarded ERFC the **Certificate of Achievement for Excellence in Financial Reporting** for its FY 2014 Comprehensive Annual Financial Report (CAFR). This is the 18th consecutive year ERFC has earned the award. The GFOA certification remains valid for a period of one year and requires, at minimum, that each CAFR satisfy both generally accepted accounting principles and legal requirements.

The Public Pension Coordinating Council also honored the ERFC recently, granting the System the **Public Pension Standards' 2015 Award**. The ERFC earned the award in recognition of meeting or exceeding professional standards for plan design and administration, as set forth in the Public Pension Standards.

### Conclusion

This report is produced through the combined efforts of the ERFC staff and advisors functioning under your leadership. It is intended to provide complete and reliable information that will advance the management decision process, serve as a means for determining compliance with legal requirements, and allow for an assessment of the stewardship of the System's funds. We extend our sincere appreciation to all those who contributed to the production of this document.

ERFC distributes this annual report to the members of the Fairfax County School Board, the Fairfax County Public Schools' Leadership Team, its Government Finance Offices, and other interested parties. Copies are made available in print and electronically, with the full report posted on the ERFC website. We hope that all recipients find the report informative and useful.

Respectfully submitted,



**Jeanne Carr, CFA**  
Executive Director  
and CIO



**Michael Lunter**  
Finance Coordinator

## LETTER FROM THE CHAIRPERSON



8001 Forbes Place, Suite 300  
Springfield, VA 22151

November 9, 2015

Dear ERFC Members,

On behalf of the Board of Trustees of the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC), it is an honor to present the Comprehensive Annual Financial Report for the fiscal year ending June 30, 2015. The ERFC Board continues to commit itself to maintaining the financial integrity of the fund, and adhering to best practices in the areas of customer service and governance. As participants and stakeholders in ERFC, you can be assured that the Board of Trustees works diligently to protect your retirement security and to safeguard the System's assets.

ERFC's defined benefit plan provides a valuable supplement to FCPS' employee members. The ERFC was designed specifically to reward educational professionals with a pension to supplement the primary benefits they earn and receive separately from the Virginia Retirement System (VRS) and Social Security. The Board recognizes the importance of ERFC's role to provide a predictable source of supplemental retirement income to the members of the ERFC.

The months subsequent to the fiscal year end introduced several changes to the composition of ERFC's Board of Trustees. The School Board appointed Marty Smith, the FCPS Chief of Staff, to ERFC's Board. Susan Quinn, the FCPS Chief Operating Officer, Kristen Michael, the FCPS Assistant Superintendent for the Department of Financial Services and Michael Burke, the individual Trustee, were re-appointed to the Board. Kimberly Adams was elected to her first three-year term as an ERFC trustee. I was re-elected as Chairperson in July 2015 and Nancy Hammerer was re-elected as Vice Chairperson. The Board looks forward to working together with the new Trustees to achieve its goals and objectives.

During the year, the ERFC Board completed all action items included in the 2013 Strategic Plan and adopted a new 2015 Strategic Plan. The newly adopted Strategic Plan continues the Board's theme of increasing the understanding and appreciation of the value of ERFC and the total retirement program. As included in the Plan, the Board fully supports the ERFC staff's development of a broad-based communications strategy which includes targeted messaging to reach each major ERFC audience.

The Strategic Plan also includes development of a process to provide Board-level reporting on risk across the organization including new threats to cyber security. Continued evaluation of emerging governance practices in order to maintain ERFC's strong governance framework is an action item emphasized in the Plan. The action item to create baseline measurements of volume for retirement staff will assure that

## LETTER FROM THE CHAIRPERSON

current staff resources can handle increased activity due to upcoming “baby boomer” retirements.

On the investment front, the Board is disappointed in the 2 percent return for the 2015 fiscal year period even though the double-digit returns in the previous two fiscal years helped moderate the results. As reported previously, the Board has taken steps to reduce its public equity exposure in order to reduce risk in the portfolio. The Board continues to analyze investment strategies in conjunction with the ERFC staff and its investment advisors to achieve a well-diversified asset mix with a risk-balanced approach, and managed with the disciplined oversight required to meet the System's long-term investment goals.

The School Board maintained FCPS' employer contribution rate at 5.60 percent of covered payroll for the 2016 fiscal year. The combined employee and employer contributions provide significant revenue for the ERFC. However, it is the System's investment earnings that provide the essential factor necessary to fulfill the guarantee of defined member benefits. Although concerned about the market volatility subsequent to the fiscal year end, the Board believes ERFC will continue to prosper by implementing prudent long-term investment strategies designed to spread pension costs over the full span of the employees' careers, during both strong and weak investment periods.

The Board of Trustees expresses its thanks to Executive Director Jeanne Carr and the ERFC staff for their accomplishments and tireless efforts with key projects during the prior fiscal year. The Board is especially enthusiastic about the ERFC staff's School Outreach program which educates ERFC members about their retirement benefits whether they are early in their career or nearing retirement.

The ERFC Board and staff value your opinions and welcome your feedback. We encourage you to visit the website at: [www.fcps.edu/erfc/](http://www.fcps.edu/erfc/) or contact us directly with any questions regarding your retirement system or retirement benefits.

Yours sincerely,



**Michael Hairston**  
Chairperson  
ERFC Board of Trustees

## BOARD OF TRUSTEES

The Board of Trustees is the governing body of the Educational Employees' Supplementary Retirement System of Fairfax County. The ERFC Board comprises seven members: three appointed by the School Board, three elected by the System's active membership, and one trustee who is neither affiliated with, nor employed by Fairfax County, the Fairfax County School Board, nor by any union or similar organization representing teachers or other Fairfax County

employees. The initial six trustees annually select and recommend a seventh ERFC Board member, or "individual Trustee," for approval by the Fairfax County School Board. The ERFC executive committee comprises the chairperson and treasurer. The Board meets monthly throughout the year, excluding August. ERFC trustees receive no compensation, but are reimbursed for business-related expenses.



**Michael A. Hairston**  
Chairperson/Trustee  
Elected Member



**Leonard Bumbaca**  
Vice Chairperson/  
Trustee  
Elected Member



**Susan Quinn**  
Treasurer/Trustee  
Appointed Member



**Michael Burke**  
Individual Trustee  
Appointed Member



**Nancy Hammerer**  
Trustee  
Elected Member

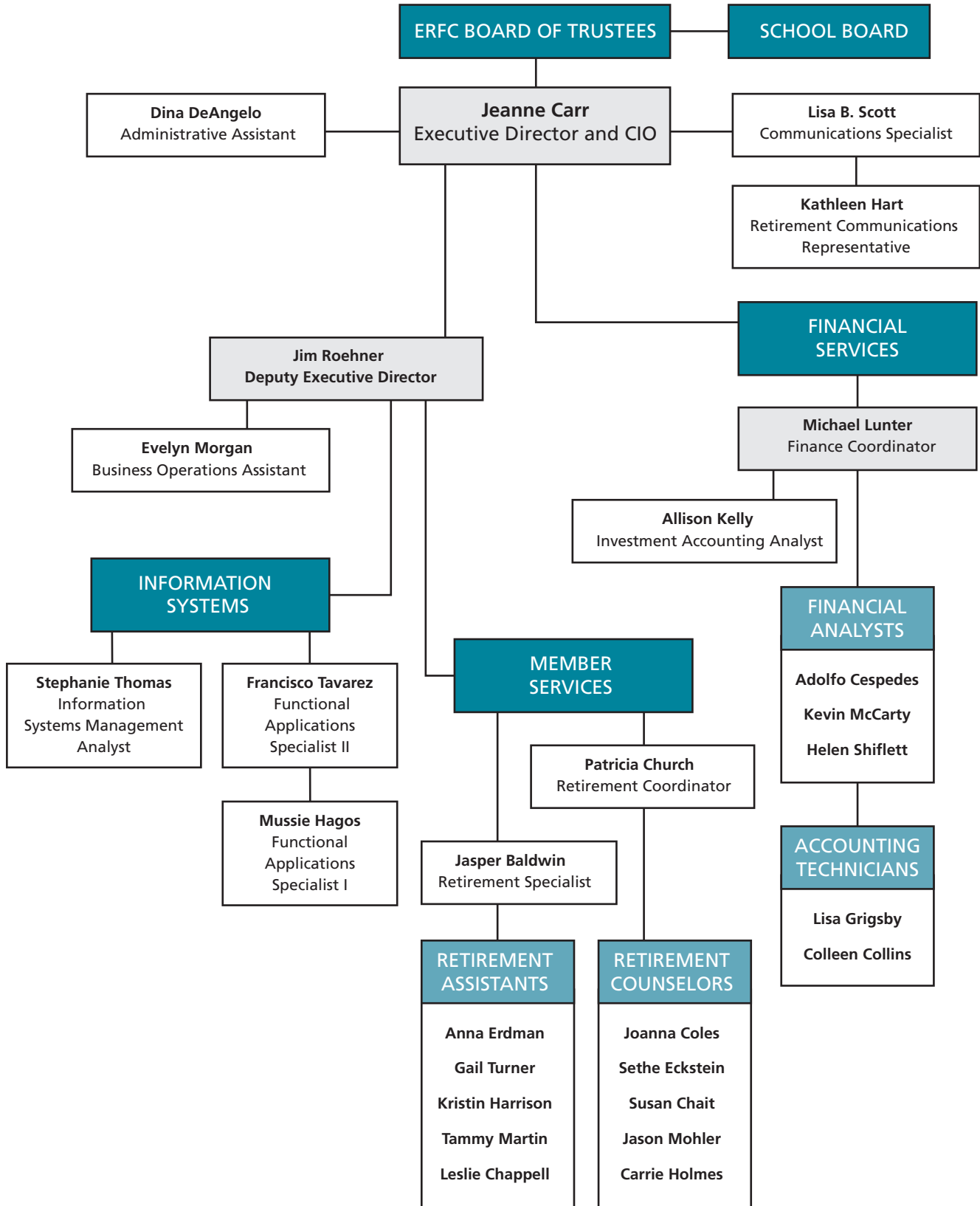


**Steven Lockard**  
Trustee  
Appointed Member



**Kristen Michael**  
Trustee  
Appointed Member

# ERFC ADMINISTRATIVE ORGANIZATION



## PROFESSIONAL SERVICES

### Investment Managers\*

#### DOMESTIC EQUITY

**Aronson Johnson Ortiz, LP**  
Philadelphia, Pennsylvania

**Epoch Investment Partners, Inc.**  
New York, New York

**Lazard Asset Management**  
New York, New York

**Mellon Capital Management Corporation**  
San Francisco, California

**Russell Investments <sup>1</sup>**  
Seattle, Washington

**Westfield Capital Management**  
Boston, Massachusetts

#### FIXED INCOME

**Loomis-Sayles & Company**  
Boston, Massachusetts

**Mellon Capital Management Corporation**  
San Francisco, California

**Mondrian Investment Group, Inc.**  
London, England

**Pacific Investment Management Company**  
Newport Beach, California

#### GLOBAL ASSET ALLOCATION

**Bridgewater Associates, Inc.**  
Westport, Connecticut

**Wellington Management**  
Boston, Massachusetts

**Pacific Investment Management Company**  
Newport Beach, California

#### HEDGE FUND

**Grosvenor Institutional Partners, L.P.**  
Chicago, Illinois

**Permal Group, Inc.**  
New York, New York

#### PRIVATE EQUITY

**Audax Management Company, LLC**  
New York, New York

**Harbourvest Partners, LLC**  
Boston, Massachusetts

**Lexington Partners**  
New York, New York

**Newstone Capital Partners, LLC**  
Los Angeles, California

**Permal Capital Management, LLC**  
Boston, Massachusetts

**Private Advisors**  
Richmond, Virginia

#### INTERNATIONAL EQUITY

**Acadian Asset Management**  
Boston, Massachusetts

**Causeway Capital Management, LLC**  
Los Angeles, California

**William Blair and Company, LLC**  
Chicago, Illinois

#### REAL ESTATE

**JP Morgan Asset Management**  
New York, New York

**Prudential Investment Management**  
Parsippany, New Jersey

**Center Square Investment Management**  
Plymouth Meeting, Pennsylvania

**UBS Global Asset Management**  
Hartford, Connecticut

### Other Service Providers

#### ACTUARY

**Gabriel, Roeder, Smith & Company**  
Southfield, Michigan

#### AUDITOR

**KPMG LLP**  
Certified Public Accountants  
Washington, D.C.

#### INVESTMENT CONSULTANT

**New England Pension Consultants**  
Boston, Massachusetts

#### LEGAL COUNSEL

**Bredhoff & Kaiser, P.L.L.C.**  
Washington, D.C.

**Groom Law Group, Chartered**  
Washington, D.C.

#### MASTER CUSTODIAN

**BNY Mellon**  
Pittsburgh, Pennsylvania

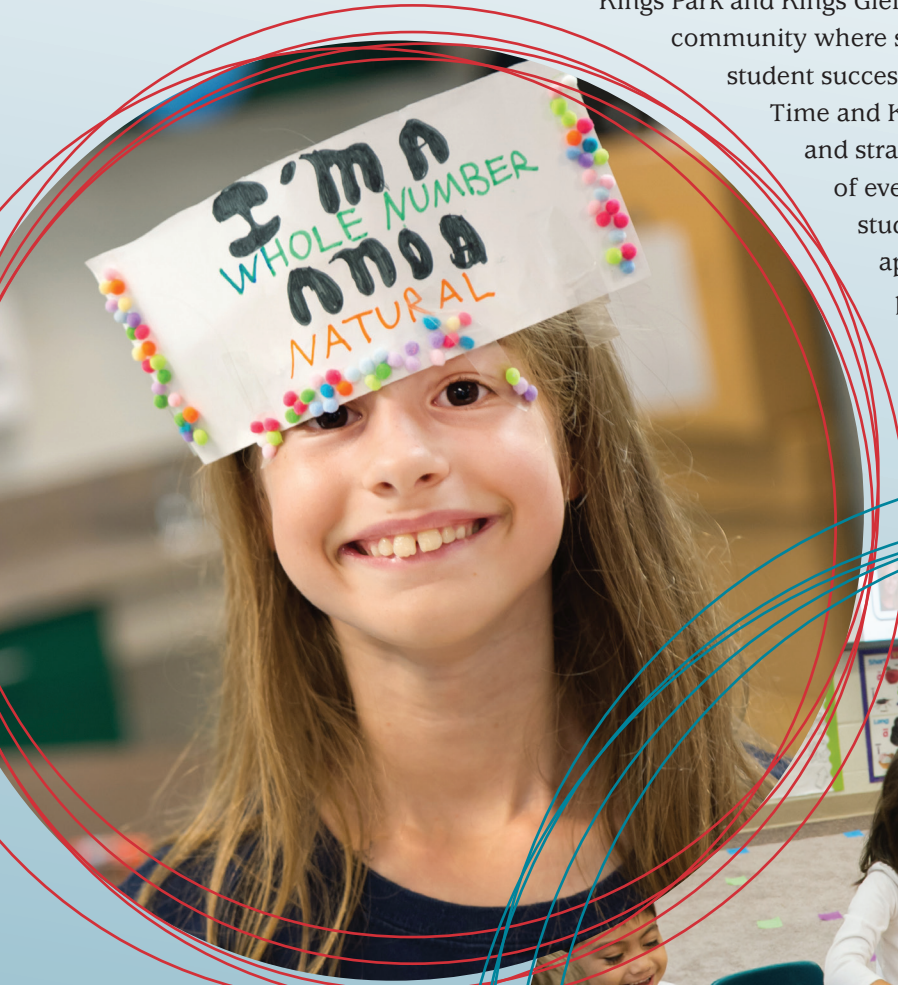
<sup>1</sup> Hired in fiscal year 2014

\* See page 48 in the Investment Section



# FINANCIAL

Kings Park and Kings Glen maintain a welcoming, caring and responsive community where students and staff work collaboratively to ensure student success. Through dedicated programs such as KP Pride Time and KG Gator Time, both schools provide remediation and strategic learning opportunities that cater to the needs of every student. Matching instructional programs with student readiness and learning styles is the deliberate approach that each school uses to promote independent problem solving and the lifelong pursuit of academic knowledge.



EDUCATION ISN'T THE LEARNING OF FACTS, BUT THE TRAINING OF THE MIND TO THINK. ALBERT EINSTEIN

## INDEPENDENT AUDITORS' REPORT



**KPMG LLP**  
Suite 12000  
1801 K Street, NW  
Washington, DC 20006

### **Independent Auditors' Report**

The Board of Trustees  
Educational Employees' Supplemental Retirement System of Fairfax County:

We have audited the accompanying financial statements of the Educational Employees' Supplemental Retirement System of Fairfax County (the System), a pension trust fund of the County of Fairfax, Virginia which comprise the statement of fiduciary net position as of June 30, 2015, the related statement of changes in fiduciary net position for the year ended June 30, 2015, and the related notes to the financial statements.

#### ***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 of America. 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, 2015, and the respective changes in fiduciary net position thereof for the year then ended in accordance with U.S. generally accepted accounting principles.

KPMG LLP is a Delaware limited liability partnership, the U.S. member firm of KPMG International Cooperative ("KPMG International"), a Swiss entity.

## INDEPENDENT AUDITORS' REPORT



### **Other Matters**

#### *Required Supplementary Information*

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 16-18, the schedule of contributions on page 32, the schedule of changes in net pension liability and related ratios information on page 33, and the schedule of investment returns on page 34 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 considers 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 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The introductory section on pages 2-10, the other supplementary information on page 35, the investment section on pages 40-53, the actuarial section on pages 56-74, and the statistical section on pages 76-85 are presented for purposes of additional analysis and are not a required part of the basic financial statements. The introductory section, other supplementary information, investment section, actuarial section, and statistical section has 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 it.

### **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated November 10, 2015 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 other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

KPMG LLP

Washington, DC  
November 10, 2015

# INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING



**KPMG LLP**  
Suite 12000  
1801 K Street, NW  
Washington, DC 20006

## **Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards***

The Board of Trustees  
Educational Employees' Supplemental Retirement System of Fairfax County:

We have audited, in accordance with the 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 financial statements of Educational Employees' Supplemental Retirement System of Fairfax County (the System), a pension trust fund of the County of Fairfax, Virginia which comprise the statement of fiduciary net position as of June 30, 2015, the related statement of changes in fiduciary net position for the year ended June 30, 2015, and the related notes to the financial statements and have issued our report thereon dated November 10, 2015.

### **Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, and contracts, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

KPMG LLP is a Delaware limited liability partnership, the U.S. member firm of KPMG International Cooperative ("KPMG International"), a Swiss entity.

## INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING



### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*KPMG LLP*

Washington DC  
November 10, 2015

# MANAGEMENT DISCUSSION AND ANALYSIS

(Unaudited)

This discussion and analysis of the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC) financial performance provides an overview of the financial activities for the fiscal year ended June 30, 2015. The information contained in this section should be reviewed in conjunction with the letter of transmittal provided in the Introduction Section of this document.

## Financial Overview

For fiscal year 2015 the return on ERFC's assets was 2.0 percent<sup>1</sup>. This resulted in a total net position value of \$2.180 billion which reflects a decrease of \$(25.2) million over fiscal year 2014's year end total (as reflected in the accompanying chart). Additional detail on this net decrease in fund value is outlined in the Summary of Additions and Deductions table contained within this Financial Section. As shown, it is comprised of four major components. They include \$32.1 million in investment income and \$114.3 million in employee and employer contributions. The additions are offset by \$162.1 million in retiree benefit payments and \$9.4 million in member refunds and administrative expenses.

ERFC's 2.0 percent return exceeded the policy benchmark return of 1.1 percent<sup>2</sup>. Three, five, and ten year returns are 9.7 percent, 10.1 percent, and 6.7 percent, respectively.

The System's investments are exposed to various risks such as interest rate, market, and credit risks. Such risks, and the resulting investment security values, may be influenced by changes in economic conditions and market perceptions and expectations. Accordingly, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements. Additional detail regarding investment results can be found in the Investment Section of this report.

## ERFC FUND BALANCES (\$ in millions)

Fiscal Year	Ending Balance	Net Change	
		Dollars	Percent
2011	1,887.0	279.3	17.4
2012	1,827.8	(59.2)	(3.1)
2013	1,956.8	129.0	7.1
2014	2,204.9	248.1	12.7
2015	2,179.7	(25.2)	(1.1)

At December 31, 2014, the actuarial value of assets totaled \$2.124 billion while liabilities totaled \$2.734 billion. This resulted in a funding ratio of 77.7 percent. ERFC's funding level is consistent with the funding levels of similar plans nationwide and as addressed in the Actuary's Certification Letter contained within this report, ERFC remains in sound financial condition.

1 Gross time-weighted rate of return as calculated by New England Pension Consultants.

2 Policy Index benchmark is 15.5% Russell 1000, 6.0% Russell 2000, 14% MSCI ACWI Ex-US, 3% MSCI Emerging Markets, 3.75% NAREIT, 3.75% NCREIF, 18% BC aggregate, 4.0% BC Credit, 4.0% BC Long Credit, 7.5% MS World Net, 7.5% Citi World Govt Bond, 8.0% HFRI FoF, 2% Cambridge PE, 3% JPM GBI EM.

## MANAGEMENT DISCUSSION AND ANALYSIS

(Unaudited)

In addition, detailed information regarding actuarial assumptions and methods can be found in the Actuarial Section of this report.

### Using this Annual Report

ERFC financial statements are comprised of the Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, and Notes to the Financial Statements. Also contained in the Financial Section is required supplementary information and other supplementary information, in addition to the basic financial statements.

The Statement of Fiduciary Net Position provides information on all of the System's assets and liabilities, with the difference between the assets and liabilities shown as net position. Ultimately, increases or decreases in net position may be used to measure the financial condition of ERFC over time.

The Statement of Changes in Fiduciary Net Position describes how ERFC's net position

changed during the current fiscal year. Additions and deductions represent revenues and expenses, respectively. Additions minus deductions represent the change in net position. For the current fiscal year, ERFC investments generated sound gains. Expenses, or deductions, which consisted of benefit payments, refunds, and administrative costs were slightly higher this fiscal year.

The Notes to the Financial Statements provide additional data, which is crucial in understanding the information included in the financial statements. The Notes to the Financial Statements immediately follow the basic financial statements.

In addition to the basic financial statements and accompanying notes, the annual report also provides required supplementary information regarding the System's changes in net pension liability and schedule of employer contributions, which is intended to assess ERFC's ability to accumulate assets to pay retirement benefits when due.

### SUMMARY OF FIDUCIARY NET POSITION

	June 30,2015	June 30,2014	Difference
<b>Assets</b>			
Total cash and investments	\$ 2,340,700,348	\$ 2,386,033,851	\$ (45,333,503)
Total receivables	12,773,186	6,792,764	5,980,422
Other assets	49,936	30,790	19,146
<b>Total assets</b>	<b>2,353,523,470</b>	<b>2,392,857,405</b>	<b>(39,333,935)</b>
<b>Liabilities</b>			
Accounts payable	1,913,934	1,957,496	(43,562)
Securities purchased	11,339,057	10,567,130	771,927
Securities lending collateral	160,546,422	175,405,588	(14,859,166)
<b>Total liabilities</b>	<b>173,799,413</b>	<b>187,930,214</b>	<b>(14,130,801)</b>
<b>Total net position restricted for pensions</b>	<b>\$ 2,179,724,057</b>	<b>\$ 2,204,927,191</b>	<b>\$ (25,203,134)</b>

## MANAGEMENT DISCUSSION AND ANALYSIS

(Unaudited)

### Financial Statements

As indicated in the Summary of Fiduciary Net Position, the System's net position value decreased \$(25.2) million or (1.1) percent in fiscal year 2015. This total decrease in net position is due primarily to a decrease of \$(45.3) million in the value of investments, an increase in receivables of \$6.0 million, a \$0.7 million increase in the value of payables along with a decrease of \$(14.9) million in securities lending collateral liabilities.

As reflected in the Summary of Additions and Deductions (below), the net change is due to \$114.3 million in contributions and \$32.1 million in net investment income, which is offset by \$162.1 million in benefits, \$5.7 million in refunds and \$3.8 million in expenses.

Also presented in the Summary of Additions and Deductions, additional information is provided regarding the differences between the fiscal year 2014 and 2015 results. These differing results are due mainly to a decrease in investment income of \$(272.6) million and an increase in contributions of \$0.1 million, offset by an increase in benefits of \$0.9 million.

### Requests for Information

This financial information is intended to provide a general overview of the System's finances. Questions concerning any of the information presented in this report or requests for additional financial information should be addressed to either the Executive Director or the Finance Coordinator of the Educational Employees' Supplementary Retirement System of Fairfax County, 8001 Forbes Place, Suite 300, Springfield, Virginia 22151.

### SUMMARY OF ADDITIONS AND DEDUCTIONS

	June 30,2015	June 30,2014	Difference
<b>Additions</b>			
Contributions			
Employer	\$ 74,324,396	\$ 74,174,082	\$ 150,314
Member	39,982,963	40,018,590	(35,627)
Net investment income	32,083,908	304,640,803	(272,556,895)
<b>Total Additions</b>	<b>146,391,267</b>	<b>418,833,475</b>	<b>(272,442,208)</b>
<b>Deductions</b>			
Benefits	162,145,265	161,276,831	868,434
Refunds	5,697,311	5,772,959	(75,648)
Admin. Expenses	3,751,825	3,629,320	122,505
<b>Total Deductions</b>	<b>171,594,401</b>	<b>170,679,110</b>	<b>915,291</b>
<b>Net increase/(decrease) in net position</b>	<b>\$ (25,203,134)</b>	<b>\$ 248,154,365</b>	<b>\$ (273,357,499)</b>



## STATEMENT OF FIDUCIARY NET POSITION

(As of June 30, 2015)

### ASSETS

<b>Cash and short-term investments</b>	
Cash	\$ 1,494,142
Cash with fiscal agent	938,015
Cash collateral for securities on loan	160,546,422
Short-term investments	17,655,629
<b>Total cash and short-term investments</b>	<b>180,634,208</b>
<b>Receivables</b>	
Interest and dividends	2,629,598
Securities sold	10,143,588
<b>Total receivables</b>	<b>12,773,186</b>
<b>Investments, at fair value</b>	
US Government obligations	22,560,732
Bonds and Mortgage Securities	103,791,491
Stocks	656,501,978
Real Estate	169,974,902
Global Asset Allocation	218,806,384
Better Beta	111,714,562
Hedge Fund of Funds	174,171,320
Private Equity	47,414,464
Commingled Fixed Income Funds	464,211,454
Commingled Equity Funds	190,918,853
<b>Total investments</b>	<b>2,160,066,140</b>
<b>Prepaid assets</b>	
Prepaid expenses	10,000
<b>Other assets</b>	
Furniture and equipment	153,637
Accumulated depreciation	(113,701)
<b>Total other assets</b>	<b>39,936</b>
<b>Total assets</b>	<b>2,353,523,470</b>
<b>Deferred Outflows of Resources</b>	<b>-</b>
<b>LIABILITIES</b>	
Accounts payable	1,913,934
Securities purchased	11,339,057
Securities lending collateral	160,546,422
<b>Total liabilities</b>	<b>173,799,413</b>
<b>Deferred Inflows of Resources</b>	<b>-</b>
<b>Net position restricted for pensions</b>	<b>\$ 2,179,724,057</b>

See accompanying Notes to the Financial Statements

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

(For the Fiscal Year Ending June 30, 2015)

<b>ADDITIONS</b>	
Contributions	
Employer	\$ 74,324,396
Plan members	39,982,963
<b>Total contributions</b>	<b>114,307,359</b>
Investment income	
Net appreciation in fair value of investments	42,160
Interest and dividends	37,472,575
Real estate income	7,548,133
Other	5,017
<b>Total investment income</b>	<b>45,067,885</b>
Less investment expenses	
Investment management fees	12,556,218
Investment consulting fees	438,166
Investment custodial fees	196,239
Investment salaries	220,628
<b>Total investment expenses</b>	<b>13,411,251</b>
Income from securities lending activities	
Securities lending income	439,036
Securities lending borrower rebates	130,392
Securities lending management fees	(142,154)
<b>Net securities lending income</b>	<b>427,274</b>
<b>Net investment income</b>	<b>32,083,908</b>
<b>Total additions</b>	<b>146,391,267</b>
<b>DEDUCTIONS</b>	
Benefits	162,145,265
Refunds	5,697,311
Administrative expense	3,751,825
<b>Total deductions</b>	<b>171,594,401</b>
<b>Net increase</b>	<b>(25,203,134)</b>
<b>Net position restricted for pensions</b>	
Beginning of year	2,204,927,191
End of year	\$ 2,179,724,057

*See accompanying Notes to the Financial Statements*

## NOTES TO THE FINANCIAL STATEMENTS

The Educational Employees' Supplementary Retirement System of Fairfax County ("ERFC", "System") is a legally separate single-employer retirement system and fund established under Virginia code to provide pension benefits to all full-time educational and administrative support employees who are employed by the Fairfax County Public Schools (Schools) and who are not covered by another Fairfax County, Virginia (County) plan. As such, and as a fund under the financial control of the School Board, the System's financial statements are included in the Schools' basic financial statements as a pension trust fund.

The System contains two primary benefit structures, *ERFC* and *ERFC 2001*. Both are defined benefit structures. The original structure, *ERFC*, became effective July 1, 1973, and is coordinated with the benefits members expect to receive from the Virginia Retirement System (VRS) and Social Security. It remains in effect; however, it was closed to new members employed after June 30, 2001. Effective July 1, 2001, all newly hired full-time educational and administrative support employees are enrolled in *ERFC 2001*. This new component incorporates a streamlined stand-alone retirement benefit structure.

The Board of Trustees is the governing body of the Educational Employees' Supplementary Retirement System of Fairfax County. The ERFC Board comprises seven members: three appointed by the School Board, three elected by the System's active membership, and one trustee who is neither affiliated with, nor employed by Fairfax County, the Fairfax County School Board, nor by any union or similar organization representing teachers or other Fairfax County employees. The initial six trustees annually select and recommend a seventh ERFC Board member, or "individual Trustee," for approval by the Fairfax County School Board. The ERFC executive committee comprises the chairperson and treasurer. The Board meets monthly throughout the year, excluding August. ERFC trustees receive no compensation, but are

reimbursed for business-related expenses.

Benefit provisions for *ERFC* and *ERFC 2001* are established and may be amended by the System's Board of Trustees subject to approval by the School Board. All members are vested for benefits after five years of service. The *ERFC* benefit formula was revised effective July 1, 1988, following changes to the Virginia Retirement System (VRS), which the *ERFC* has historically supplemented. The benefit structure is designed to supplement VRS and Social Security benefits to provide a level retirement benefit throughout retirement. *ERFC 2001* has a stand-alone structure. Member contributions for *ERFC* and *ERFC 2001* are made through an arrangement that results in a deferral of taxes on the contributions. Further details of member contributions may be found in Article III of both Benefit Structure Documents.

At December 31, 2014, the date of the most recent actuarial valuation, the System's membership consisted of:

Retirees and beneficiaries currently receiving benefits	10,524
Terminated employees entitled to benefits but not yet receiving them	3,761
Active plan members	21,352
<b>Total</b>	<b>35,637</b>

*ERFC* and *ERFC 2001* provide for a variety of benefit payment types. *ERFC*'s payment types include Service Retirement, Reduced Service, Disability, Death-in-Service, and Deferred Retirement. *ERFC 2001*'s payment types include Service Retirement, Death-in-Service, and Deferred Retirement. Minimum eligibility requirements for full service benefits for *ERFC* is either (a) age 65 with 5 years of service or (b) age 55 with 25 years of service. Minimum eligibility requirements for full service benefits for *ERFC 2001* is either (a) age 60 with 5 years of service or (b) any age with 30 years of service. Annual post-retirement cost-of-living increases of 3 percent are effective each March 31. Participants in their first full year of retirement

*Notes, continued on next page*

## NOTES TO THE FINANCIAL STATEMENTS

receive a 1.49 percent increase. Participants who retire on or after January 1 receive no cost-of-living increase that first March. Additional detail regarding all benefit payment types can be found in the actuarial valuation and/or the System Plan Document. ERFC also issues this publicly available financial report which includes financial statements and required supplementary information. A copy of this report may be obtained by writing to ERFC, 8001 Forbes Place, Suite 300, Springfield, VA 22151 or by calling 703-426-3900. It is also available online at [www.fcps.edu/erfc/publications.shtml](http://www.fcps.edu/erfc/publications.shtml).

### 1. Summary of Significant Accounting and Other Policies

#### Basis of Accounting

The System's financial statements have been prepared under the accrual basis of accounting in accordance with accounting principles applicable to governmental units in the United States of America. Member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the System. The costs of administering the System are paid for by the use of investment income and employer and employee contributions.

In fiscal year 2014, the System implemented GASB Statement No. 67, *Financial Reporting for Pension Plans*, issued June, 2012. GASB No. 67 addresses accounting and financial reporting requirements for pension plans. The requirements for GASB No. 67 include changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The implementation of GASB No. 67 did not significantly impact the investment balances. The total pension liability, determined in accordance with GASB

No. 67, is presented in Note 3 and in the Required Supplementary Information on page 31.

#### Investment Valuation

Short-term investments are reported at cost, which approximates fair value. All other investments are reported at fair value or estimated fair value. Securities which are traded on national or international exchanges are reported at fair value based on the last reported sales price at current exchange rates. The System records these investment purchases and sales as of the trade date but are not finalized until settlement date, which is approximately three business days for domestic securities and five to seven business days for foreign securities. Until finalized, these investment purchases and sales are recorded as payables and receivables, respectively.

The values of the commingled funds and limited partnerships are provided to ERFC's master custodian by the investment managers. These commingled funds and limited partnerships include private real estate, global asset allocation, better beta, hedge fund of funds, emerging market equity, emerging market debt, and private equity. The fair value of these investments is determined in different ways. For private real estate, the values of the actual property holdings are determined periodically but usually annually and subject to independent appraisal. However, since these holdings are relatively illiquid, there is not a ready market for these assets and it's possible that fair value can differ from the assessed value. For global asset allocation, better beta, hedge fund of funds, emerging market equity and emerging market debt, the assets are reported at fair value as determined by the markets for those assets. For private equity, since market quotes are not readily available, the investment values are determined by the manager, based upon annual audits, cash flow analysis, purchases and sales of similar investments and other practices used within the industry.

Cash received as collateral on securities lending transactions and investments with such cash are reported as assets along with the related liability for collateral received.

## NOTES TO THE FINANCIAL STATEMENTS

### Cash

ERFC maintains its cash with the County, which invests cash and allocates interest earned net of a management fee, on a daily basis to the System based on the System's average daily balance of equity in pooled cash. For the fiscal year ended June 30, 2015, the cash balance of \$1,494,142 represents funds that could not be invested in the County's enhanced cash fund until July 1, 2015.

The bank balance of the County's public deposits was either insured by the Federal Deposit Insurance Corporation or through the State Treasury Board pursuant to the provisions of the Security for Public Deposit Act. As of June 30, 2015, cash with fiscal agent totaled \$938,015. This cash is insured and represents receipts from investment sales occurring on the last day of the month.

### 2. Contribution Requirements

The contribution requirements for *ERFC* and *ERFC 2001* members are established and may be amended by the System's Board of Trustees with the approval of the School Board. The requirements are based upon a fundamental financial objective of having rates of contribution that remain relatively level from generation to generation of employees. To determine the appropriate employer contribution rates and to assess the extent to which the fundamental financial objective is being achieved, the System has actuarial valuations prepared annually.

Members are required to contribute 3 percent of annual salary. The employer is required to contribute at an actuarially determined rate which presently is 5.60 percent. The actuarial valuations as of odd numbered years are used to set the employer contribution rate for the two-year

VALUATION DATE:	DECEMBER 31, 2014
Notes	Actuarially determined contribution rates are calculated as of December 31 of odd numbered years, and determine the contribution rate for the two-year period beginning 18 months after the valuation date. For example, the December 31, 2013 valuation determined the contribution rates for Fiscal 2016 and 2017. The December 31, 2014 valuation provides an interim measure of funding status and contribution sufficiency. The December 31, 2015 valuation will determine contribution rates for Fiscal 2018 and 2019.

#### METHODS AND ASSUMPTIONS USED TO DETERMINE CONTRIBUTION RATES:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	24 years from July 1, 2016
Asset Valuation Method	5 Year smoothed market; 25% corridor
Inflation	3.0%—approximate; No explicit price inflation assumption is used in this valuation.
Salary Increases	3.75% to 9.05% including inflation
Investment Rate of Return	7.50%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2010 valuation pursuant to an experience study of the period 2005-2009.
Mortality	1994 Group Annuity Mortality Table set back 3 years for both males and females. This table appeared to have an approximate 7% margin for future improvement at the time of adoption.

#### OTHER INFORMATION:

Notes	There were no benefit changes during the year.
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## NOTES TO THE FINANCIAL STATEMENTS

period beginning 18 months after the valuation date. As such, the December 31, 2011 valuation recommended that the contribution rate for the two-year period beginning July 1, 2013 to June 30, 2015 be increased to 5.6 percent. Restructuring of the VRS employee contribution rate caused the School Board to decrease the ERFC member contribution rate to 3 percent beginning in fiscal year 2013.

### 3. Net Pension Liability Disclosures

The components of ERFC's net pension liability at June 30, 2015 were as follows:

Total Pension Liability	\$ 2,789,227,428
Plan Fiduciary Net Position	2,179,724,057
Net Pension Liability	\$ 609,503,371
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	78.15 %

#### Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2014, using update procedures to roll forward the total pension liability to the plan's fiscal year end. The

actuarial assumptions applied to all periods in the measurement.

#### Single Discount Rate

A single discount rate of 7.5% 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 7.5%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

#### Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined in conjunction with a formal study of experience during the period January 1, 2005 to December 31, 2009. The reasonable range at the time the study was

*Notes, continued on next page*

### ASSET ALLOCATION

Asset Class	Target Allocation	Long-Term Expected Real Rate Of Return
Domestic Large Cap Equity	15.50%	5.66%
Domestic Small Cap Equity	6.00%	6.45%
International Equity	14.00%	6.69%
Emerging Market Equity	3.00%	8.79%
Real Estate	7.50%	4.37%
Core Fixed Income	20.00%	1.12%
Unconstrained Fixed Income	6.00%	1.34%
Emerging Market Debt (Local)	3.00%	4.61%
Global Asset Allocation	15.00%	4.25%
Absolute Return	8.00%	3.99%
Private Equity	2.00%	9.23%
<b>Total</b>	<b>100.00%</b>	

## NOTES TO THE FINANCIAL STATEMENTS

performed was from 5.32% to 8.31%, meaning that there was at least a 50% chance that actual returns would fall within that range.

Best estimates of arithmetic real rates of return as of the measurement date are summarized in the table on the prior page. New England Pension Consultants supplied the information in the table.

The investment consultant's inflation expectation is 3%. The Global Asset Allocation category is a blend of Global Equity, Global Fixed Income, and Inflation Sensitive Assets (commodities).

### Pension Liability Sensitivity

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following table presents the plan's net pension liability, calculated using a single discount rate of 7.5% as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower (6.5%) or 1-percentage-point higher (8.5%):

#### Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

Current Single Rate:

1% Decrease	Assumption	1% Increase
6.50%	7.50%	8.50%
\$ 942,644,465	\$ 609,503,371	\$ 333,262,964

Sensitivity results at 6.50% interest were based upon computer runs. Results at 8.50% were based upon the 6.50% results and estimation techniques.

The Schedule of Changes in Net Pension Liability and Related Ratios, presented as RSI following the Notes to the Financial Statements, presents multi-year trend information about whether the plan's net position is increasing or decreasing over time relative to the total pension liability.

### 3. Investments

The authority to establish pension funds is set forth in sections 51.1-800 of the Code of Virginia (Code) which provides that the County may purchase investments for pension funds (including common and preferred stocks and corporate bonds) that meet the standard of judgment and care set forth in Section 51.1-124 of the Code.

The System does not have investments (other than U.S. government and U.S. government guaranteed obligations) in any one organization that represents 5 percent or more of net position restricted for pensions.

### Investment Policy

The System's investment policy is established by the Board of Trustees based on information and/or recommendations provided by ERFC's investment consultant and ERFC staff. The policy may be amended as necessary by the Board of Trustees and is reviewed at least annually. There were no significant investment policy changes during the fiscal year. The Fund's asset structure is enumerated in the investment policy and reflects a proper balance of the Fund's needs for liquidity, growth of assets and the risk tolerance of the Trustees. The target asset mix, consistent with the achievement of the long-term objective of the Fund is presented below:

Security Class	Interim Strategic Targets as of June 30, 2015
Domestic Large Cap Equity	13.0 %
Domestic Small Cap Equity	5.5
International Equity	17.0
Real Estate	7.5
Fixed Income	29.0
Global Asset Allocation/ Better Beta	15.0
Absolute Return	8.0
Private Equity	5.0
Cash	-
<b>Total</b>	<b>100.0 %</b>

*Notes, continued on next page*

## NOTES TO THE FINANCIAL STATEMENTS

### Rate of Return

For the year ended June 30, 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 1.49 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. This method differs from the time-weighted rate of return calculation referenced at the beginning of the Management Discussion and Analysis, which is performed on a gross basis.

### Derivative Financial Instruments

As permitted by the Code described above, ERFC invests in derivative instruments on a limited basis in accordance with the Board of Trustees' investment policy. Investment in derivatives allows the System to increase earnings and/or hedge against potential losses. The risks associated with derivative investments include market risk resulting from fluctuations in interest and currency rates, the credit worthiness of counter parties to any contracts entered into, and the credit worthiness of mortgages related to collateralized mortgage obligations (CMOs). Specific authorization by the Trustees is required should investment managers

seek to purchase securities on margin or leverage.

During the fiscal year, the System invested in collateralized mortgage obligation (CMO) derivatives. These derivatives are securities created using the underlying cash flows from mortgage-backed securities as collateral. As of June 30, 2015, the fair value of the CMOs was \$512,304, which is included in the mortgage-backed securities classification on the financial statements. The change in fair value during the fiscal year is reported in the net appreciation in fair value of investments.

In addition, the System had indirect investments in derivatives through its ownership interest in the Better Beta fund, one Private Equity manager, two of the Real Estate managers, three of the fixed income managers, and one of the Global Asset Allocation managers. These portfolios are commingled funds in which ERFC has a percentage ownership. Derivatives in these portfolios consisted of interest rate swaps and caps, which reduce the effect of interest rate fluctuations by converting floating rate financing into fixed rate loans for

*Notes, continued on next page*

### INVESTMENT COMBINED DURATION AS OF JUNE 30, 2015

Investment Category	Amount	Modified Duration
U.S. Government Obligations	\$ 102,759,104	5.67
Agencies	9,062,097	5.34
Credit	72,321,391	6.70
Corporate Bonds	140,429,621	7.78
Mortgages	83,770,913	4.02
ABS/CMBS	44,175,155	5.99
Emerging Market	46,339,029	4.74
International Bonds	29,030,769	5.04
Convertible and Preferred	26,728,867	5.76
Bank Loans	6,211,341	0.26
Floating Rate Notes	8,043,207	0.26
Inflation Linked Bond	2,327,148	0.42
Cash and Cash Equivalents	16,954,446	(1.39)
Other	10,215,398	0.01
<b>Total</b>	<b>\$ 598,368,486</b>	

\* Weighted Duration in years: 5.52



## NOTES TO THE FINANCIAL STATEMENTS

## CREDIT QUALITY SUMMARY AS OF JUNE 30, 2015

Rating	Category	Percent	Amount	Total	Percent		
AAA	Cash & Cash Equivalents	0.7%	4,328,693	84,595,124	14.1%		
AAA	Convertible Securities	0.1%	333,245				
AAA	Domestic Bonds	3.9%	23,104,445				
AAA	Fixed Income Securities - Uncategorized	1.9%	11,611,299				
AAA	International Bonds	2.0%	11,822,707				
AAA	Mortgage Backed Securities	1.8%	10,811,980				
AAA	Preferred Securities	0.0%	22,023				
AAA	US Government Obligations	3.8%	22,560,732				
AA	Cash & Cash Equivalents	0.0%	62,089			189,365,370	31.6%
AA	Convertible Securities	0.3%	1,560,196				
AA	Domestic Bonds	3.0%	18,041,375				
AA	Fixed Income Securities - Uncategorized	0.8%	4,654,412				
AA	International Bonds	0.6%	3,436,238				
AA	Mortgage Backed Securities	13.6%	81,560,758				
AA	US Government Obligations	13.4%	80,050,302				
A	Cash & Cash Equivalents	0.0%	10,338	77,866,134	13.0%		
A	Convertible Securities	0.9%	5,638,983				
A	Domestic Bonds	6.9%	41,079,027				
A	Fixed Income Securities - Uncategorized	0.3%	1,514,391				
A	International Bonds	4.2%	25,040,266				
A	Mortgage Backed Securities	0.8%	4,583,129				
BBB	Bank Loans	0.1%	340,175			118,536,640	19.8%
BBB	Convertible Securities	1.1%	6,663,313				
BBB	Domestic Bonds	9.6%	57,214,640				
BBB	Fixed Income Securities - Uncategorized	1.6%	9,300,381				
BBB	International Bonds	6.8%	40,849,996				
BBB	Mortgage Backed Securities	0.6%	3,882,335				
BBB	Preferred Securities	0.0%	285,800				
BB	Bank Loans	0.5%	2,840,981	56,881,327	9.5%		
BB	Convertible Securities	1.1%	6,490,476				
BB	Domestic Bonds	5.4%	32,607,247				
BB	Equities	0.0%	73,879				
BB	Fixed Income Securities - Uncategorized	0.9%	5,462,696				
BB	International Bonds	1.3%	7,578,602				
BB	Mortgage Backed Securities	0.3%	1,535,297				
BB	Preferred Securities	0.0%	292,149				
B	Bank Loans	0.4%	2,672,188			32,715,672	5.5%
B	Convertible Securities	0.7%	3,975,894				
B	Domestic Bonds	2.9%	17,215,290				
B	Fixed Income Securities - Uncategorized	0.6%	3,420,534				
B	International Bonds	0.6%	3,786,906				
B	Mortgage Backed Securities	0.2%	1,405,547				
B	Preferred Securities	0.0%	239,313				
Below B	Bank Loans	0.0%	200,665	9,292,141	1.6%		
Below B	Convertible Securities	0.0%	84,650				
Below B	Domestic Bonds	1.0%	5,773,279				
Below B	Fixed Income Securities - Uncategorized	0.3%	1,645,971				
Below B	International Bonds	0.0%	175,660				
Below B	Mortgage Backed Securities	0.2%	1,411,916				
NR	Bank Loans	0.0%	157,332			29,116,078	4.9%
NR	Cash & Cash Equivalents	2.2%	12,893,101				
NR	Domestic Bonds	0.2%	1,066,499				
NR	Equities	0.0%	38,965				
NR	Fixed Income Securities - Uncategorized	0.2%	1,370,651				
NR	International Bonds	0.4%	2,482,527				
NR	Mortgage Backed Securities	1.7%	10,052,447				
NR	Preferred Securities	0.2%	1,054,556				
<b>Total</b>		<b>100.0%</b>	<b>598,368,486</b>	<b>598,368,486</b>	<b>100.0%</b>		

Continued...

## NOTES TO THE FINANCIAL STATEMENTS

real estate investments. Futures, because they are more liquid than over the counter derivatives, have among the lowest transaction costs available, carry minimal counterparty risk and are de facto currency hedged. Non Deliverable Forward's (NDF's) obtain exposure to a currency and its interest rate where the actual purchase of onshore debt is difficult. The interest rate exposure comes through the difference between the spot foreign exchange (F/X) rate and the forward F/X rate, and through investing the US dollar (USD) cash used as collateral in short dated US bonds. Forward commodity contracts hedge changes in cash flows due to market price fluctuations related to the expected purchase of a commodity. Currency forwards are used for hedging non-USD denominated physical instruments back to the base currency. Options are contracts that give the buyer the right, but not the obligation, to buy or sell an underlying asset at a specific price on or before a certain date. Similarly, Swap Options are contracts that give the buyer the right, but not the obligation, to enter into an underlying swap. Credit Default Swaps (CDS) are contracts that offer guarantees against the non-payment of loans. At June 30, 2015, exposure to interest rate swaps was \$(2,618,836), exposure to interest rate caps was \$1,252,599, exposure to futures contracts was \$2,952,108, exposure to NDFs was \$(6,532,743), exposure to forward commodity contracts was \$(199,397), exposure to currency

forward contracts was \$(36,210,228), exposure to options was \$737,331, exposure to swap options was \$40,981, and exposure to CDSs was \$(52,891).

Regarding certain risk factors, the Governmental Accounting Standards Board Statement No. 40, *Deposit and Investment Risk Disclosures*, requires that state and local governments report their exposure to investment risks in four categories: interest rate risk, credit risk, concentration of credit risk, and foreign currency risk.

### Interest Rate Risk

Three of ERFC's five fixed income managers use the effective duration method to control interest rate risk. The fourth fixed income manager uses the modified duration method, and the fifth fixed income manager uses the option adjusted method. Regarding maturity, ERFC does not place limits on these fixed income managers. However, it does expect the average duration to be within 30 percent of the portfolio's benchmark. One of the managers utilizing the effective duration method is expected to be within 50 percent of the Barclays Capital Government/Credit Index.

### Credit Risk

The System's policy on credit quality states that the average credit quality of the portfolio must be at least A. Up to 20 percent of the portfolio may be invested in below investment grade (that is,

*Notes, continued on next page*

### SUMMARY OF SECURITY LENDING JUNE 30, 2015

Securities	Cash Fair Value	Cash Collateral
International bonds	\$ 463,013	\$ 517,398
Domestic corporate bonds	22,808,681	23,378,960
International stock	7,580,018	8,676,982
Domestic stock	124,424,783	127,565,905
Government	398,796	407,177
<b>Total</b>	<b>\$ 155,675,291</b>	<b>\$ 160,546,422</b>

## NOTES TO THE FINANCIAL STATEMENTS

Moody's Baa or Standard & Poor's BBB ratings). If a security has a split rating, the lower rating will be considered in meeting the minimum quality standard. One of ERFC's fixed income managers may invest up to 35 percent in below investment grade securities. For this manager, if a security has a split rating, the higher rating shall be considered.

As of June 30, 2015, the System had four active fixed income managers and one passive fixed income manager. The Credit Quality Summary lists the ratings of all of ERFC's fixed income investments according to Moody's Investment Services and Standard & Poor's. The unrated Cash and Cash Equivalents of \$12,893,101 is comprised of cash, short term investments, derivatives, receivables and payables.

#### Concentration of Credit Risk

The System's policy limits the securities of any one issuer to 10% at cost and 15% at market of each fixed income portfolio. The policy allows an exception for government securities and its agencies.

At June 30, 2015, and as addressed previously, the System had four active fixed income managers

and one passive fixed income manager. The active manager portfolios had values of \$201.0 million, \$83.4 million, \$174.7 million and \$53.5 million. The indexed portfolio had a value of \$85.7 million. The market value of the largest issue other than the U.S. Government in the portfolios of the active managers was only 8.62 percent of that portfolio. Since the passive manager's portfolio is an indexed mutual fund, it is excluded from the Concentration of Credit Risk measurement.

#### Deposits

At June 30, 2015, short-term investments with the custodial bank totaled \$17,655,629. These investments are collateralized with securities held by the agent in the System's name or are in a short-term investment pool.

#### Securities Lending

The System's Board of Trustees' policy permits the fund to participate in a securities lending program. The securities lending program is administered by the System's custodian. Certain securities of the System are loaned to approved broker/dealers who

*Notes, continued on next page*

### INVESTMENTS WITH THE CUSTODIAN AS OF JUNE 30, 2015, INCLUDING THE FOLLOWING:

Investment Type	Fair Value
US Government Obligations	\$ 22,560,732
Bonds and Mortgage Securities	103,791,491
Stocks	656,501,978
Real Estate	169,974,902
Global Asset Allocation	218,806,384
Better Beta	111,714,562
Hedge Fund of Funds	174,171,320
Private Equity	47,414,464
Commingled Fixed Income Funds	464,211,454
Commingled Equity Funds	190,918,853
<b>Subtotal investments</b>	<b>\$ 2,160,066,140</b>
Cash collateral for securities on loan	160,546,422
<b>Total</b>	<b>\$ 2,320,612,562</b>

## NOTES TO THE FINANCIAL STATEMENTS

Fair Value of Foreign Currency Risk (As of June 30, 2015)					
Currency	Cash & Cash Equivalents	Equity	Fixed Income Securities	Preferred Securities	Grand Total
AUSTRALIAN DOLLAR	\$(20,188)	11,861,744	4,211,363	-	\$16,052,919
BRAZILIAN REAL	(518,491)	2,209,472	16,866,257	100,245	18,657,483
BRITISH POUND	59,720	-	-	-	59,720
BULGARIAN LEV	(39,890)	-	-	-	(39,890)
CANADIAN DOLLAR	809,409	17,874,914	4,893,220	-	23,577,543
CHILEAN PESO	(17,754)	-	126,530	-	108,776
CHINESE YUAN RENMINBI	(9,493)	-	-	-	(9,493)
COLUMBIAN PESO	46,593	-	3,257,211	-	3,303,804
CZECH KORUNA	107	-	92,392	-	92,499
DANISH KRONE	1,235	1,956,173	14,059	-	1,971,467
EURO CURRENCY UNIT	1,581,127	68,816,220	7,802,281	2,634,089	80,833,717
GERMAN MARK	-	-	45,264	-	45,264
HONG KONG DOLLAR	99,166	13,460,034	561,211	6,904	14,127,315
HUNGARIAN FORINT	909,070	-	-	-	909,070
INDIAN RUPEE	50,986	-	-	-	50,986
INDONESIAN RUPIAH	11,362	2,422	3,817,680	-	3,831,464
ISRAELI SHEKEL	9	-	-	-	9
JAPANESE YEN	462,984	50,468,556	807,728	-	51,739,268
KOREAN WON	(16,831)	-	124,806	-	107,975
MALAYSIAN RINGGIT	52,733	666,925	3,172,908	-	3,892,566
MEXICAN NUEVO PESO	474,209	1,260,751	13,089,625	-	14,824,585
NEW TAIWAN DOLLAR	80,380	5,529,640	-	-	5,610,020
NEW TURKISH LIRA	-	224,055	3,228,669	-	3,452,724
NEW ZEALAND DOLLAR	278,907	601,292	6,729,503	-	7,609,702
NIGERIAN NAIRA	-	-	-	-	-
NORWEGIAN KRONE	(515,887)	1,579,900	2,041,037	-	3,105,050
PERUVIAN NUEVO SOL	14,355	-	2,663,327	-	2,677,682
PHILIPPINES PESO	114,681	23,700	-	-	138,381
POLISH ZLOTY	(1,100,260)	1,288,299	3,650,880	-	3,838,919
POUND STERLING	81,153	39,168,238	3,603,442	-	42,852,833
QATARI RIYAL	-	1,186,705	-	-	1,186,705
RUSSIAN RUBLE	-	-	2,988,230	-	2,988,230
S AFRICAN COMM RAND	65,643	1,930,264	4,669,279	21,341	6,686,527
SINGAPORE DOLLAR	(3,952)	3,029,091	128,771	-	3,153,910
SOUTH KOREAN WON	7,401	11,362,673	-	-	11,370,074
SWEDISH KRONA	223,236	5,737,829	-	-	5,961,065
SWISS FRANC	132,744	19,057,396	1,166,594	-	20,356,734
THAILAND BAHT	9,140	698,779	-	-	707,919
TURKISH LIRA	2,034	-	-	-	2,034
Grand Total	\$3,325,638	\$259,995,072	\$89,752,267	\$2,762,579	\$355,835,556

Notes, continued on next page

## NOTES TO THE FINANCIAL STATEMENTS

borrow the securities and provide collateral in the form of cash, U.S. Treasury or Government Agency Securities, letters of credit issued by approved banks, or other securities of a quality specified in the securities lending agreement. Collateral must be provided in the amount of 102 percent of fair value for domestic securities and 105 percent for international securities. The System did not impose any restrictions during the period on the number of loans the custodian made on its behalf. The custodian provides for full indemnification to the System for any losses that might occur in the program due to the failure of a broker/dealer to return a borrowed security or failure to pay the System for income of the securities while on loan. The fair value of collateral is monitored daily by the custodian.

Cash collateral is invested in a fund maintained by the custodian or its affiliate. Per stated custodian policy, the maximum weighted average maturity of the fund is 60 days. Investment income from the securities lending program is shared 75/25 by ERFC and the custodian, respectively. At year-end, the System had no overall credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System.

Cash received as collateral and the related liability of \$160,546,422 as of June 30, 2015, are shown on the Statement of Fiduciary Net Position. As of June 30, 2015, the fair value of securities on loan for cash collateral was \$155,675,291. Securities received as collateral are not reported as assets and liabilities since ERFC does not have the ability to pledge or sell the collateral securities absent borrower default.

During 2008, one of the securities held in the collateral pool in which ERFC is invested suffered a significant downgrade and consequently was worth only a relatively small portion of its face value. ERFC's portion of the investment, securities issued by Sigma Finance, totaled approximately \$875,598. In 2010, ERFC received a distribution of \$44,341 for the securities. In 2013, ERFC received a Class

Action settlement of \$232,916 reducing the loss to \$598,341. In April 2014, ERFC began depositing its monthly securities lending income to the cash collateral account. This will reduce the collateral insufficiency over time until the deficit is repaid. As of June 30, 2015, the outstanding Sigma liability amount is \$130,693.

### **Custodial Credit Risk**

Custodial credit risk is the risk that in the event of a bank failure, the system's funds will be lost. However, the System's investments and deposits are not exposed to custodial credit risk since they are held by the agent in the System's name. Other investments such as mutual funds, a short-term investment pool and a cash collateral investment pool which invests cash collateral for securities on loan, are not exposed to custodial risk due to their non-physical form. As such, the System does not have a custodial credit risk policy.

### **Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. The System's currency risk exposures primarily exist in the international equity and active fixed income holdings. At the present time, there are no specific foreign currency guidelines for equities or active fixed income investments, however, equity and fixed income managers are all measured against specific performance standard and risk guidelines identified in ERFC's investment policy. The chart on the previous page provides a summary of ERFC's foreign currency risk.

## **4. Income Taxes**

The Internal Revenue Service (IRS) issued a determination letter on May 22, 2012, which stated that the System and its underlying trust qualify under the applicable provisions of the Internal Revenue Code and therefore are exempt from federal income taxes. In the opinion of the plan administrator, the System and its underlying trust have operated within the terms of the IRS regulations and are qualified under the applicable provisions of the Internal Revenue Code.

**REQUIRED SUPPLEMENTARY INFORMATION**

(Unaudited)

Historical contribution information is presented herein for the last ten fiscal years. This information is intended to help users assess the System's funding status on a going-concern basis, assess progress made in accumulating assets to pay benefits when due, and make comparisons with other public employee retirement systems. Please refer to the actuarial assumptions on page 21 for relevant notes to this schedule.

Analysis of the dollar amounts of plan net position, total pension liability, and net pension liability in isolation can be misleading. Expressing plan net position as a percentage of the total pension liability provides one indication of the System's funding status. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system.

Trends in the net pension liability and covered employee payroll are both affected by inflation. Expressing the net pension liability as a percentage of covered employee payroll approximately adjusts

for the effects of inflation and aids in the analysis of the System's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller the percentage, the stronger the system.

The following Schedule of Changes in Net Pension Liability and Related Ratios illustrates whether the plan's net position is increasing or decreasing over time relative to the total pension liability, and the net pension liability as it relates to covered employee payroll. As addressed previously, the most recent actuarial valuation was effective December 31, 2014. The Schedule of Changes in Net Pension Liability and Related Ratios was prepared using procedures to roll forward the results of the most recent actuarial valuation to the fiscal year end June 30, 2015. This schedule presents information that is currently available. Additional years will be added until 10-year trend information can be presented.

**SCHEDULE OF CONTRIBUTIONS** (Last 10 Fiscal Years)

<b>FY Ending June 30</b>	<b>Actuarially Determined Contribution</b>	<b>Actual Contribution</b>	<b>Contribution Deficiency (Excess)</b>	<b>Covered Payroll</b>	<b>Actual Contribution as a % of Covered Payroll</b>
2006	\$ 34,648,918	\$ 34,648,918	-	\$ 1,028,157,804	3.37%
2007	36,644,001	36,644,001	-	1,087,359,080	3.37%
2008	38,334,140	38,334,140	-	1,137,511,573	3.37%
2009	37,281,658	40,012,480	(2,730,822)	1,187,313,947	3.37%
2010	35,146,816	37,868,623	(2,721,807)	1,183,394,469	3.20%
2011	47,118,111	47,118,111	-	1,166,289,876	4.04%
2012	50,738,815	52,934,245	(2,195,430)	1,219,683,057	4.34%
2013	68,242,010	67,734,634	507,376	1,268,438,838	5.34%
2014	72,748,999	74,174,082	(1,425,083)	1,324,537,175	5.60%
2015	74,791,177	74,324,396	466,781	1,366,029,848	5.44%

**REQUIRED SUPPLEMENTARY INFORMATION**

(Unaudited)

**SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS**

FY Ending June 30	2015	2014
<b>Total pension liability</b>		
Service Cost	\$ 77,493,999	\$ 75,787,752
Interest on the Total Pension Liability	198,938,575	192,723,577
Changes of benefit terms	-	-
Difference between expected and actual experience of the Total Pension Liability	(17,051,192)	(19,051,630)
Changes of assumptions	-	-
Benefit payments, including refunds of employee contributions	(167,842,576)	(167,049,790)
<b>Net Change in Total Pension Liability</b>	<b>\$ 91,538,806</b>	<b>\$ 82,409,909</b>
<b>Total Pension Liability - Beginning</b>	<b>2,697,688,622</b>	<b>2,615,278,713</b>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 2,789,227,428</b>	<b>\$ 2,697,688,622</b>
<b>Plan Fiduciary Net Position</b>		
Contributions - Employer	\$74,324,396	\$ 74,174,082
Contributions - Employee	\$39,982,963	40,018,590
Net Investment Income	32,083,908	304,640,803
Benefit Payments, including refunds of employee contributions	(167,842,576)	(167,049,790)
Pension Plan Administrative Expense	(3,751,825)	(3,629,320)
Other	-	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>(25,203,134)</b>	<b>248,154,365</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>2,204,927,191</b>	<b>1,956,772,826</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 2,179,724,057</b>	<b>\$ 2,204,927,191</b>
<b>Net Pension Liability - Ending (a) - (b)</b>	<b>609,503,371</b>	<b>492,761,431</b>
<b>Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>78.15%</b>	<b>81.73%</b>
<b>Covered Employee Payroll</b>	<b>\$1,366,029,848</b>	<b>\$ 1,324,537,175</b>
<b>Net Pension Liability as a Percentage of Covered Employee Payroll</b>	<b>44.62%</b>	<b>37.20%</b>

1 This schedule presents information for available years. Additional years will be added prospectively until 10 years of information is available.

## REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited)

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### SCHEDULE OF INVESTMENT RETURNS

<b>FY Ending June 30</b>	<b>Annual Return<sup>1</sup></b>
2014	15.91%
2015	1.49%

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1 Annual money-weighted rate of return, net of investment expenses.

2 This schedule presents information for available years. Additional years will be added prospectively until 10 years of information is available.



## OTHER SUPPLEMENTARY INFORMATION

(Unaudited)

### SUMMARY OF SIGNIFICANT CHANGES TO THE PENSION SYSTEM

The following provides a summary of the composite employer and employee contribution rates and other significant changes to the pension system during the past eleven fiscal years.

#### Contribution Rates (as a percent of salary)

Fiscal Year	Composite		
	Employer	Employee	Total
June 2006	3.37	4.00	7.37
2007	3.37	4.00	7.37
2008	3.37	4.00	7.37
2009	3.37	4.00	7.37
2010	3.20	4.00	7.20
2011	4.04	4.00	8.04
2012	4.34	4.00	8.34
2013	5.34	3.00	8.34
2014	5.60	3.00	8.60
2015	5.60	3.00	8.60

- July 1, 2006 — The implementation of a Benefit Restoration Plan in order to make benefit payments in excess of the limits established by Section 415 of the Internal Revenue Code.
- April 29, 2004 – The Board of Trustees agreed to transition to calendar year actuarial valuations.

- December 18, 2003 — Effective July 1, 2004, members hired prior to July 1, 2001 (ERFC Benefit Structure), are eligible for a Level Lifetime Benefit (LLB) that is calculated by determining the annuitized value of the greater of their accumulated contribution balance or the present value of the currently provided defined benefit. The following changes apply to members hired on or after July 1, 2001 (ERFC 2001 Benefit Structure):

- The defined contribution component of the benefit structure that was to be offered as an option to members on July 1, 2006, was eliminated.
- The matching contribution provisions of the benefit structure were eliminated effective July 1, 2004. Members who met the requirements for a contribution match as of June 30, 2004, had the match credited to their accounts on June 30, 2004.
- Beginning July 1, 2004, members who retire are eligible for a minimum benefit that is calculated by determining the annuitized value of their accumulated contribution balance.

- July 24, 2003 – The Working After Retirement (WAR) program is closed to new entrants, effective June 30, 2004, which is two years earlier than originally planned.

**OTHER SUPPLEMENTARY INFORMATION**

(Unaudited)

**SCHEDULE OF ADMINISTRATIVE EXPENSES**

(Year Ended June 30, 2015)

<b>Personnel services</b>	
Salaries and wages	\$ 1,932,915
Retirement contributions	432,227
Insurance	298,510
Social security	156,385
<b>Total personnel services</b>	<b>2,820,037</b>
<b>Professional services</b>	
Actuarial	153,854
Legal	81,860
Payroll disbursement	48,463
Plan automation support	31,523
Strategic planning	19,020
Audit	55,756
<b>Total professional services</b>	<b>390,476</b>
<b>Communications</b>	
Printing	15,799
Postage	21,545
<b>Total communications</b>	<b>37,344</b>
<b>Supplies</b>	
Office supplies	13,952
Dues and subscriptions	10,681
<b>Total supplies</b>	<b>24,633</b>
<b>Other services and charges</b>	
Board travel and staff development	33,835
Equipment	141,602
Building rent	269,790
Depreciation expense and asset disposal	17,443
Miscellaneous	16,665
<b>Total other services and charges</b>	<b>479,335</b>
<b>Total administrative expenses</b>	<b>\$ 3,751,825</b>

## OTHER SUPPLEMENTARY INFORMATION

(Unaudited)

**SCHEDULE OF INVESTMENT EXPENSES**

(Year Ended June 30, 2015)

<b>Investment management fees</b>	
Fixed income managers	
Loomis-Sayles and Company, L.P.	\$ 571,942
GAM USA, Inc.	557,181
Mellon Capital Management Corporation	18,228
Mondrian Investment Partners (US), Inc.	379,308
Pacific Investment Management Company	405,558
Russell Investments	34,514
Equity managers	
Aronson Johnson Ortiz, LLC	128,061
Epoch Investment Partners, Inc.	458,528
Lazard Asset Management	330,232
Mellon Capital Management Corporation	23,428
T. Rowe Price Associates, Inc.	323,909
Westfield Capital Management	353,094
International managers	
Acadian Asset Management, Inc.	650,610
Causeway Capital Management, LLC	538,972
William Blair & Company	935,607
Real Estate managers	
J.P. Morgan Asset Management	451,405
Prudential Financial	217,063
UBS Realty Investors, LLC	359,605
CenterSquare Investment Management (formerly Urdang)	501,404
Global Asset Allocation managers	
Pacific Investment Management Company	913,802
Wellington Management Company LLP	962,520
Better Beta	
Bridgewater Associates	548,028
Hedge fund of funds	
Grosvenor Capital Management, L.P.	831,450
Permal Investment Management Services, Ltd.	928,360
Private equity	
Audax Mezzanine Fund III, L.P.	133,275
HarbourVest Partners IX - Buyout Fund L.P.	138,431
HarbourVest Partners IX - Credit Fund L.P.	80,147
HarbourVest Partners IX - Venture Fund L.P.	140,397
HIPEP VII Partnership Fund L.P.	65,748
Lexington Capital Partners VII L.P.	75,227
Lexington Capital Partners VIII L.P.	129,906
Newstone Capital Partners II, L.P.	94,876
Permal Private Equity Opportunities IV, L.P.	62,500
Permal Private Equity Opportunities V, L.P.	47,902
Private Advisors Buyout Fund IV, L.P.	75,000
Private Advisors Buyout Fund V, L.P.	90,000
<b>Total investment management fees</b>	<b>12,556,218</b>
<b>Other investment service fees</b>	
Custodial fees - Mellon Trust	196,239
Investment consultant fees—New England Pension Consulting, Inc.	414,984
Monitor managers' trading processes—Zeno Consulting Group	20,000
Foreign tax consulting—Pricewaterhouse Coopers	3,182
Investment salaries	220,628
<b>Total other investment service fees</b>	<b>855,033</b>
<b>Total investment expenses</b>	<b>\$ 13,411,251</b>

**OTHER SUPPLEMENTARY INFORMATION**

(Unaudited)

**SCHEDULE OF PROFESSIONAL SERVICE FEES**

(Year Ended June 30, 2015)

<b>Service Provider</b>	<b>Nature of Service</b>	<b>Amount</b>
Gabriel, Roeder, Smith & Company	Actuary	\$ 153,854
Levi, Ray & Shoup, Inc.	Plan automation support	\$ 31,523
Bredhoff & Kaiser, P.L.L.C.	Legal counsel	\$ 45,890
Groom Law Group, Chartered	Legal counsel	\$ 35,970
ADP payroll services	Pension disbursement	\$ 48,463
KPMG, LLP	Audit	\$ 55,756
Various	Miscellaneous	\$ 19,020
<b>Total professional service fees</b>		<b>\$ 390,476</b>

# INVESTMENT (UNAUDITED)

The student populations found at Kings Park and Kings Glen create age-appropriate environments that individually cater to the needs of students in grades K-3 and 4-6. Focusing on early literacy at Kings Park ensures that primary students are proficient before moving into higher grades. Focusing on upper grade-level skills such as advanced math, Kings Glen prepares older elementary students for their middle school years. Because the band and strings programs begin at Kings Glen, students from Kings Park look forward to an outstanding arts and musical theatre program at Kings Glen that has been featured on FCPS' Red Apple Channel 21.



CHILDREN MUST BE TAUGHT HOW TO THINK, NOT WHAT TO THINK. MARGARET MEAD

## CONSULTANT REPORT ON INVESTMENT ACTIVITY



NEPC, LLC

October 21, 2015

The Board of Trustees  
The Educational Employees' Supplementary Retirement System of Fairfax County  
8001 Forbes Place, Suite 300  
Springfield, Virginia 22151

Dear Board Members,

This letter summarizes the structure and performance of the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC) Fund through the fiscal year ending June 30, 2015.

As of the June 30th fiscal year-end, the Fund was in compliance with policy ranges, and had 39.3 percent in equities, 7.8 percent in real estate equity, 27.5 percent in bonds, 8.1 percent in hedge fund strategies, 2.1 percent in private equity, 15.1 percent in global asset allocation/better beta strategies, and 0.1 percent in cash. Over the past year, the Fund has maintained public equity levels lower than the median equity allocation when measured against public fund peers in the InvestorForce Public Defined Benefit Universe.

The Fund earned 2.0%<sup>1</sup> in the year ending June 30, 2015, which ranked in the 77<sup>th</sup> percentile of all public funds within the InvestorForce Universe. Over the last 12 months ending June 30, 2015, ERFC underperformed its assumed actuarial return target of 7.5% by 5.5%. Fund assets decreased slightly from \$2.20 billion at the end of fiscal 2014 to approximately \$2.18 billion as of June 30, 2015<sup>2</sup>.

### Market Commentary

If 2013 was the year to own equities, and 2014 was the year to have balance, then 2015 has been defined as the year of moderation. US equity markets continued to move higher, while bond markets produced modest returns. On the international side, non-US equities edged lower as the US dollar grew strong and commodity market turmoil heightened, though this trend has begun to change in the second half of calendar year 2015.

The US economy appeared to exhibit continued resilience in the face of global market conditions and geopolitical events. Based on more consistent economic news for the US, domestic equities topped off another positive year, yields on fixed income securities narrowed, the economy grew at a moderately healthy pace and unemployment receded further. The broad domestic equity market, as measured by the S&P 500 Index, posted its tenth consecutive quarterly gain, capping off the fiscal year with a +7.4% return. The domestic bond market, as measured by the Barclays Aggregate Bond Index, returned

<sup>1</sup> Return data for the Fund was reconciled from manager provided time-weighted returns that were calculated in accordance with the CFA Institute's Global Investment Performance Standards (GIPS).<sup>®</sup> Valuations, where available, are based on published national securities exchange prices, as provided by ERFC's custodian, BNY Mellon.

<sup>2</sup> The fund assets presented in the investment section are reported at fair value.

## CONSULTANT REPORT ON INVESTMENT ACTIVITY



+1.9% over the same period. The global equity market, as measured by the MSCI All Country World Index (net), returned +0.7% for the fiscal year, reflecting a blend of the positive results in the US and the negative performance in the non-US developed markets (MSCI EAFE down -4.2%) and emerging markets (MSCI EM down -5.1%).

During the quarter ended September 30, 2014, US equities appeared fairly calm on the surface with the S&P 500 index gaining 1.1%. Riskier small-cap equities significantly underperformed large-cap equities amid growing concerns around economic growth in Europe and China. To this end, the Russell 2000 index fell 7.4%. The energy sector was the worst performer as oil prices dropped amid rising global supplies. In terms of style, growth outperformed value in both large and small stocks. Beyond the US, equities in developed and emerging markets underperformed due to, in part, currency weakness as the MSCI EAFE and the MSCI EM lost 5.8% and 3.5%, respectively. The losses came on the back of intensifying tensions in the Middle East and the Ebola virus outbreak in West Africa. Also, weak economic data in Europe pushed the ECB to continue easing its monetary policy. Europe was the worst performing developed market region, returning -7.0% in the third quarter. Meanwhile, subdued economic data in Japan resulted in a weaker yen, which bolstered exports and limited losses to 2.3% for the quarter. In local currency terms, emerging markets were up 0.6%, but currency depreciation led to a loss of 3.5% in dollar terms. Emerging countries in Europe were the largest detractors with Greece (-20%), Hungary (-12.8%) and Russia (-15.4%) suffering significant downdrafts in the third quarter. Gains in India (2.3%), Indonesia (3.4%) and China (1.4%) helped Asia grab the title of best performing region within the emerging economies. Risk aversion permeated fixed income markets in the third quarter amid growing concerns around geopolitical events and global economic growth. As a result, demand for long-dated US Treasuries increased, while the fear of interest rate hikes triggered a selloff in shorter-dated maturities. To this end, the Treasury yield curve flattened with the spread between two- and 10-year rates falling 16 basis points to 1.92%. The yield on the 10-year Treasury dropped four basis points during the quarter, finishing at 2.49%. Treasury Inflation-Protected Securities, or TIPS, significantly underperformed nominal Treasuries amid lower inflation expectations due to a stronger US dollar, lower energy prices and underwhelming growth prospects in Europe. The Barclays US TIPS Index posted a loss of 2.0% for the three months ended September 30. Buffeted by outflows, the high-yield market lost 1.9% in the third quarter. Spreads on high-yield bonds increased to 463 basis points, nearly 100 basis points wider than the lows seen in June.

US stocks continued their winning streak in the fourth quarter of 2014 amid positive economic data. Investors moved towards defensive equities, companies that benefitted from lower energy prices, and bond-proxy stocks such as healthcare, consumer staples, utilities, REITs and consumer discretionary. Energy was the worst performing sector, bearing the brunt of increasing oil supply, a stronger US dollar and deteriorating global macroeconomic conditions. Small-cap stocks outperformed large-cap equities for the quarter but fell behind in the year as a whole. The S&P 500 Index outperformed the Russell 2000 Index by nearly 9% in 2014, the widest margin since 1998. Value equities narrowly outperformed growth among large-cap and mid-cap stocks in 2014, while growth bested value in small-cap equities. Stocks of developed (MSCI EAFE) and emerging markets (MSCI EM) didn't fare as well, losing 3.6% and 4.5%, respectively, during the quarter, as continuing weakness in commodities and a strong US dollar eroded returns. In local currency terms, developed markets performed relatively better with the Eurozone roughly flat while Japanese stocks gained nearly 5%. The energy and materials sectors were the weakest performers in

## CONSULTANT REPORT ON INVESTMENT ACTIVITY



developed and emerging markets. Among countries, Russia traded off 33% while the ruble declined nearly 32%. A bright spot in emerging markets was the financial sector in China, which gained amid speculation of a supportive monetary policy. Government bonds of developed markets rallied in the fourth quarter against a backdrop of diverging policy among central banks, global growth concerns outside of the US and a steep decline in energy prices. The yield on the 10-year US Treasury dropped 35 basis points during the quarter, finishing at 2.17%. Rates on shorter-dated Treasuries rose on expectations that the Fed would start raising rates in mid-2015. In addition, expectations of lower inflation pulled down rates on the long-end, flattening the yield curve. The spread between two- and 10-year rates fell 44 basis points to 1.50%. Treasury Inflation-Protected Securities, or TIPS, underperformed nominal Treasuries as falling energy prices weighed on the outlook for inflation. The Barclays US 1-10 Year TIPS Index posted a loss of 1.0% for the three months ended December 31, 2014. High-yield bonds were the worst affected by the slide in oil prices with the Barclays US Corporate High-Yield Index losing 1.0%. In general, higher-rated credits fared the best. Leveraged loans were in the red for a second consecutive quarter with the CS Leveraged Loan Index losing 0.5% in the last three months of the year.

Central banks of the world took center stage in the first quarter of 2015, easing monetary conditions across economies representing more than half of the world's GDP. Many emerging market economies exercised an accommodative monetary policy. Not to be outdone, central banks in developed markets stole the show as the European Central Bank embarked on a €1 trillion bond-buying program. The Swiss National Bank rattled foreign currency markets with a dramatic removal of its euro currency peg, further pushing interest rates into negative territory. At home, the spotlight remained firmly on the Federal Reserve, which appears on track to raise interest rates sometime this year. Expectations of a Fed rate increase relative to rate cuts across the globe continued to push the dollar higher. US equities were also affected by the uncertainty surrounding Fed action and bounced around during the quarter. The S&P 500 returned just under +1% for the three months ended March 31, while small-cap stocks, as measured by the Russell 2000 Index, gained 4.3% during the same period. Growth trumped value in each benchmark, helped by a strong showing by biotech. Small-cap equities benefitted from their largely domestic focus while a stronger dollar took a bite out of large-cap stocks. Monetary accommodation and increasing optimism in Japan led to gains of 5% for the EAFE Index during the quarter, outpacing domestic and emerging markets. Japan was the top performer, returning close to +10%, while New Zealand and Singapore trailed the pack, selling off roughly 1%. Emerging markets returned +2.2% in the first quarter, bolstered by gains in India and Russia. Russia was the top performer, with quarterly returns of +18%. Other commodity-driven markets, such as Brazil, lagged on the back of continued pressure on energy prices. Global sovereign debt gained in the first quarter as yields fell amid declining inflation and accommodative monetary policies. The ECB's €1 trillion government bond-buying program pushed yields in the Eurozone to record lows, while US Treasury yields also declined on renewed expectations of a delayed Fed rate hike. The yield on the 10-year US Treasury dropped 23 basis points to 1.94% at the end of March. The spread between two- and 10-year rates fell 12 basis points to 1.38%. Treasury Inflation-Protected Securities, or TIPS, returned +1.4% during the quarter, as measured by the Barclays US TIPS Index. The 10-year breakeven inflation rate increased 10 basis points to 1.78% as inflationary expectations inched up with the stabilization of oil prices. High-yield bonds bounced back after two quarters of losses, returning +2.5%.

The US economy continued to show modest signs of strength during the quarter ended June



## CONSULTANT REPORT ON INVESTMENT ACTIVITY



30, 2015. Smaller capitalization companies marginally out performed large-cap equities, with the S&P 500 Index returning +0.3% versus +0.4% for the Russell 2000 Index for the second quarter, with growth outpacing value across the capitalization spectrum. Global and international equities had a modest second quarter, with the MSCI EAFE Index returning +0.6%. Emerging markets gained 0.7% according to the MSCI Emerging Markets Index. Japanese equities continue to perform well with gains of 3%, while Indonesia was down a hefty 14%. Reversing course from a strong first quarter, most fixed-income securities were in the red for the three months ended June 30. The 30-year Treasury ended 57 basis points higher at 3.11% in the second quarter, while the two-year Treasury was up seven basis points to 0.63%; this dynamic typically occurs in anticipation of a more hawkish monetary policy to combat an expected increase in inflation. Higher-yielding and shorter-duration securities were able to hold on to and, in some instances, even add to their gains from the first quarter. Moving to emerging markets, external and local currency debt lost ground in the second quarter as yields increased globally. Emerging market currencies—in particular, the Mexican peso, Thai baht and Turkish lira—weakened against the US dollar. US dollar-denominated debt, as measured by the JP Morgan EMBI Index, fell 34 basis points; local currency debt fell 96 basis points, according to the JP Morgan GBIEM Index.

Changes to the fund during fiscal year 2015 included hiring T. Rowe Price to replace Turner Investments to manage the domestic equity large-cap growth assets due to performance and organizational changes. Within the fixed income space, J.P. Morgan Investment Management was hired to replace PIMCO, managing a Core Plus mandate. The fund continued to build out the private equity portfolio, with the Board voted to commit additional capital to HarbourVest Partners Fund X. In addition, the Board approved an updated Investment Policy Statement. The portfolio continues to be diversified across asset classes and remains in compliance with policy targets.

Sincerely,

A handwritten signature in blue ink that reads "Douglas Moseley".

Douglas Moseley, Partner

A handwritten signature in blue ink that reads "Keith Stronkowsky".

Keith Stronkowsky, CFA, Sr. Consultant

## STRATEGIC REVIEW AND INVESTMENT POLICY

### Introduction

The members of the ERFC Board of Trustees have jurisdiction over and ultimate fiduciary responsibility for the investment of the System's assets. In carrying out their responsibilities, they must adhere to applicable laws, regulations, and rulings with respect to the duties of investment fiduciaries. Accordingly, they are required to "discharge their duties in the interest of plan participants" and "act with the same care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a similar capacity and familiar with those matters would use in the conduct of a similar enterprise with similar aims." The Board of Trustees has established a Statement of Investment Policy that identifies a set of investment objectives, guidelines, and performance standards for the assets of the fund. The objectives are formulated in response to the following:

- the anticipated financial needs of the ERFC

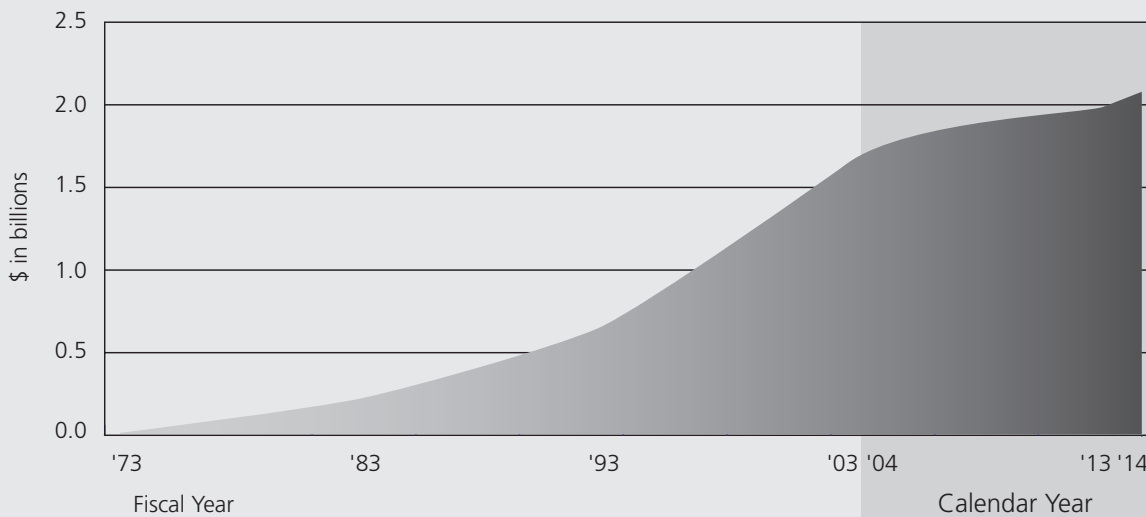
- consideration of risk tolerance; and
- the need to document and communicate objectives, guidelines and standards to the investment managers.

### Investment Objectives

The investment objective of the ERFC is to ensure, over the long-term life of the fund, an adequate level of assets to fund the benefits for ERFC members and their beneficiaries at the time they are payable. The Trustees seek to achieve a high level of total investment return consistent with a prudent level of portfolio risk. The fund's actuary uses an investment return assumption of 7.5 percent, compounded annually, of which 3.75 percent constitutes an assumed rate of inflation and 3.75 percent reflects an assumed real rate of return on investments. The fund's objective is to meet or exceed the assumed real rate of return over time, while preserving the fund's principal.

### ERFC TOTAL FUND GROWTH — VALUATION ASSETS SINCE INCEPTION

(As reflected in the December 31, 2014 actuarial valuation)



## INVESTMENT MANAGERS

### ASSETS UNDER MANAGEMENT

As of June 30, 2015 (\$ in millions)

Investment Manager	Investment Type	Amount
<b>Equities</b>		
<b>Large Capitalization</b>		
Aronson Johnson Ortiz	Value	\$ 117.5
Mellon Capital Management Corp.	Core Index (Russell 1000)	111.3
T. Rowe Price	Growth	118.8
<b>Small/Mid Capitalization</b>		
Epoch Investment Partners, Inc.	Value	48.3
Lazard Asset Management	Core	45.8
Westfield Capital Management	Growth	54.2
<b>International</b>		
Acadian Asset Management	Core	112.1
Causeway Capital	Value	91.3
William Blair & Company	Growth	93.8
William Blair & Company	Emerging Market	64.6
<b>Fixed Income</b>		
Loomis-Sayles & Company	Core Plus	134.2
Mellon Capital Management Corp.	Core Index	85.7
JP Morgan Asset Management	Core Plus	202.8
Mondrian Investments	Emerging Market	53.5
GAM Fund Management	Unconstrained	83.4
Loomis-Sayles & Company	Unconstrained	40.6
<b>Global Asset Allocation/Better Beta</b>		
Bridgewater Associates, Inc.	Better Beta	111.7
Wellington Management Co.	Global Asset Allocation	115.9
Pacific Investment Management Co.	Global Asset Allocation	102.9
<b>Hedge fund of funds</b>		
Grosvenor Institutional Partners	Hedge Fund of Funds	88.7
Permal Group	Hedge Fund of Funds	87.4
<b>Private Equity</b>		
Audax	Private	4.0
Lexington	Private	7.5
Newstone	Private	2.7
Permal Private Equity	Private	4.0
Private Advisors	Private	11.9
HarbourVest	Private	16.5
<b>Real Estate</b>		
JP Morgan Asset Management	Private	30.6
Prudential Financial	Private	27.4
UBS Realty Investors	Private	34.4
Center Square Investment Management	Public	77.7
Cash (temporary cash)		1.8
<b>Total</b>		<b>\$ 2,183.0</b>

## ASSET STRUCTURE

### Interim Strategic Target Allocation

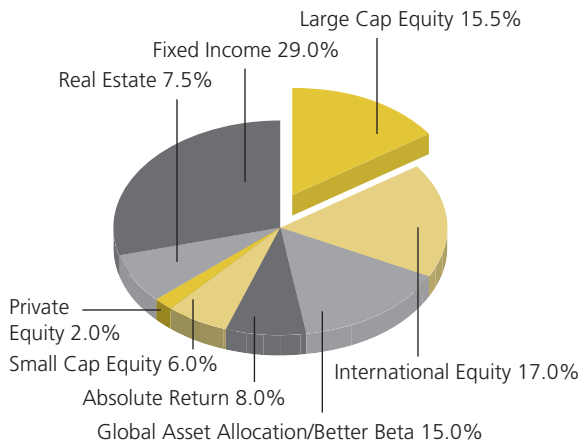
The asset structure shown below represents the Trustees' assessment of their optimal asset allocation as of June 30, 2015. This interim strategic allocation provides a reasonable expectation that the fund's investment objective can be achieved based on historic relationships of asset class performance.

The table below provides a comparison between the target asset mix, consistent with the achievement of the long-term objective of the fund, and the actual asset allocation as of June 30, 2015.

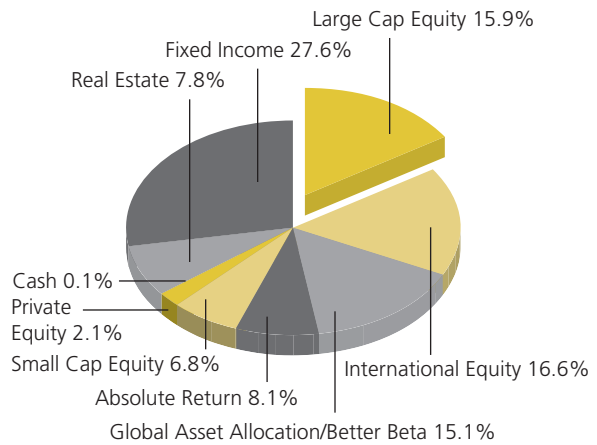
### Actual Asset Allocation as of June 30, 2015

The asset structure of ERFC has historically reflected a proper balance of the fund's needs for liquidity, growth of assets, and risk tolerance. The fund's investment policy is designed to continue to meet its long-term investment objectives while, at the same time, provide increased flexibility to meet short-term funding requirements.

### INTERIM STRATEGIC TARGETS



### ACTUAL ASSET ALLOCATION



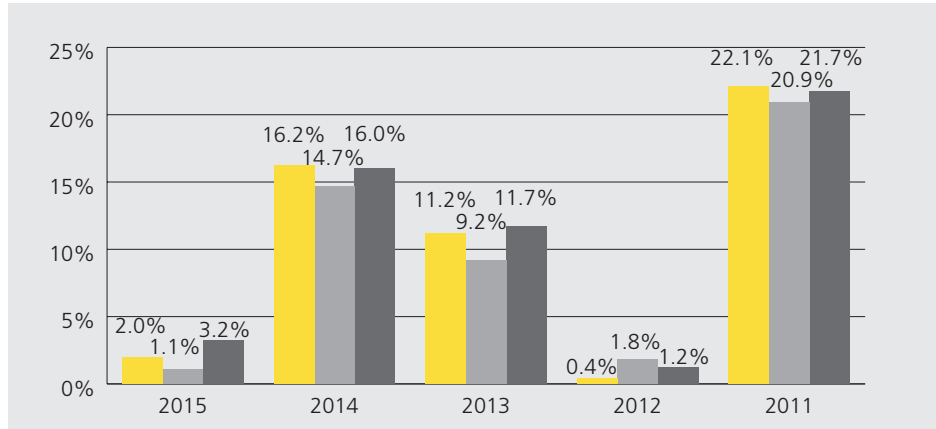
Security Class	Interim Strategic Targets as of June 30, 2015	Actual Asset Allocation as of June 30, 2015
Domestic Large Cap Equity	15.5 %	15.9 %
Domestic Small Cap Equity	6.0	6.8
International Equity	17.0	16.6
Real Estate	7.5	7.8
Fixed Income	29.0	27.6
Global Asset Allocation/Better Beta	15.0	15.1
Absolute Return	8.0	8.1
Private Equity	2.0	2.1
Cash	0.0	0.0
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

## INVESTMENT RESULTS

Fiscal Years Ending June 30

### TOTAL FUND RETURNS

- ERFC
- Benchmark\*
- Public Funds\*\*



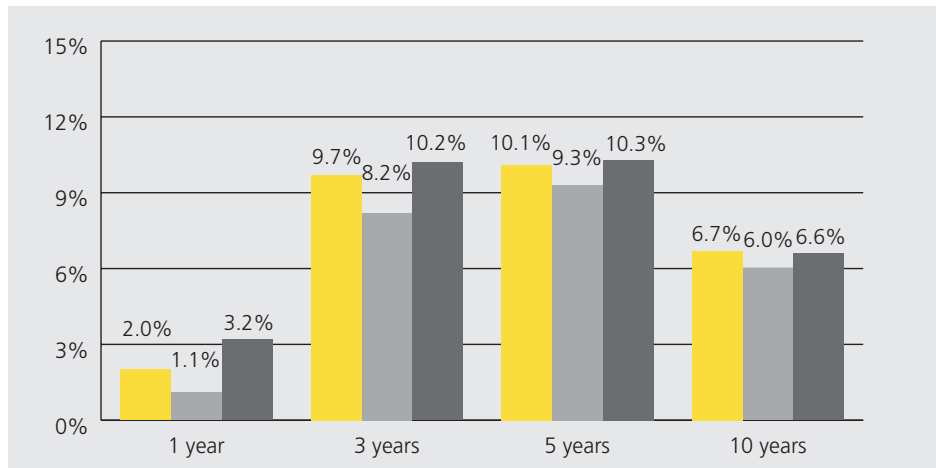
\* Diversified benchmark is 15.5% Russell 1000, 6.0% Russell 2000, 14% MSCI ACWI Ex-US, 3.0% MSCI Emerging Markets, 3.75% FTSE EPRA/NAREIT, 3.75% NCREIF, 18.0% Barclays Aggregate Bond Index, 4.0% BC Credit, 4.0% BC Long Credit, 7.5% MSCI World Net, 7.5% CitiWorld Govt Bond, 8.0% HFRI FoF, 2.0% Cambridge PE, 3.0% JPM GBIEM

\*\* New England Pension Consultants Universe

For the Periods Ending June 30, 2015

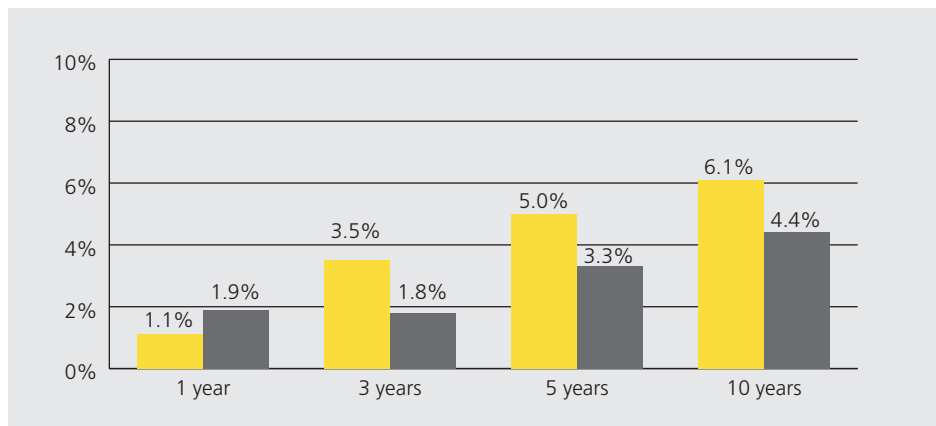
### TOTAL FUND

- ERFC
- Benchmark\*
- Public Funds\*\*



### DOMESTIC FIXED INCOME

- Fixed Income
- Benchmark:  
Barclays  
Capital  
Aggregate Bond

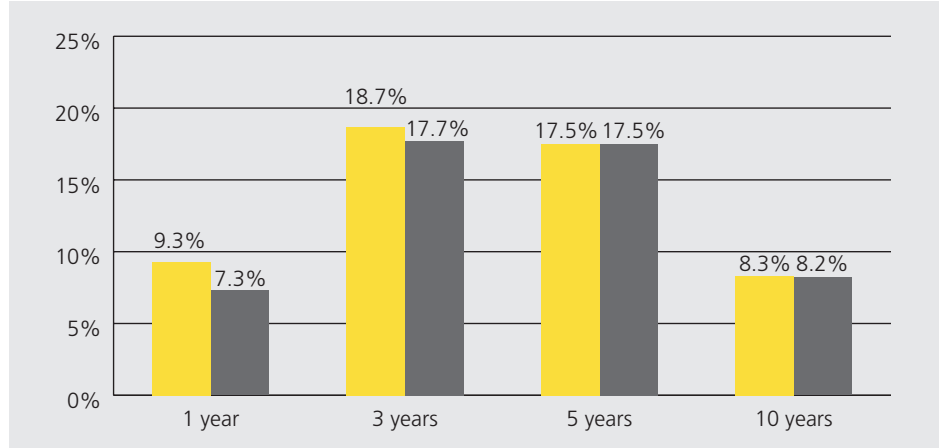


## INVESTMENT RESULTS

(For the Periods Ending June 30, 2015)

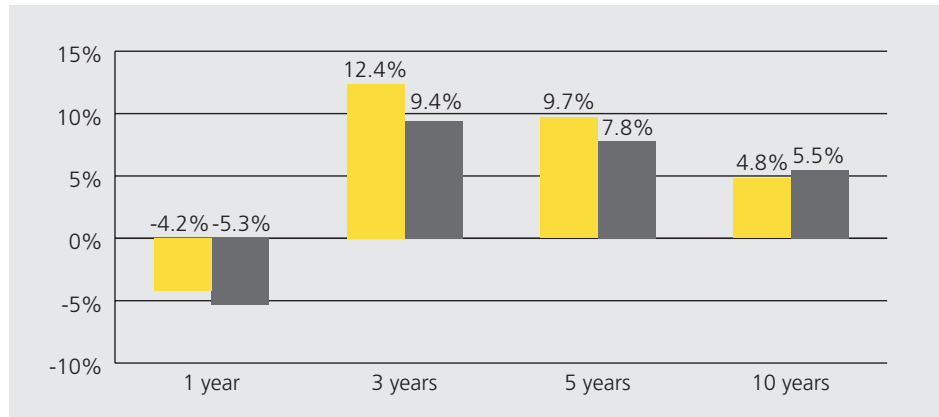
### DOMESTIC EQUITY

- Domestic Equity
- Benchmark: Russell 3000 Index



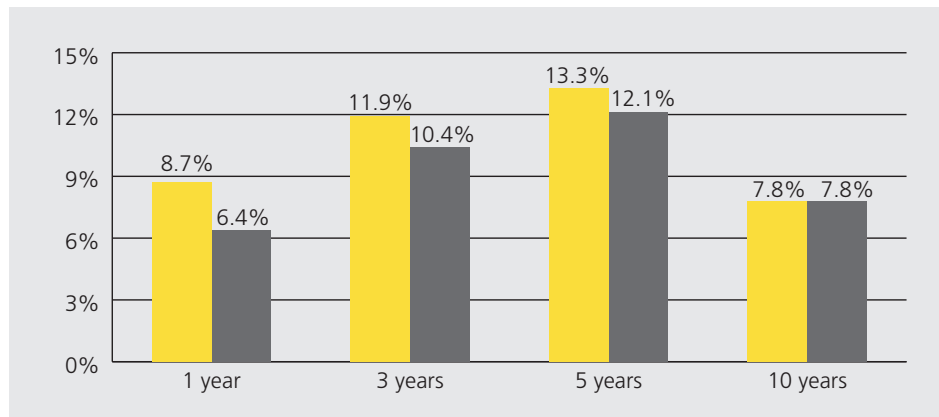
### INTERNATIONAL EQUITY

- International Equity
- Benchmark: MSCI/ACWI Ex-USA Index



### REAL ESTATE

- Real Estate
- Benchmark: 50% FTSE EPRA/NAREIT 50% NCREIF



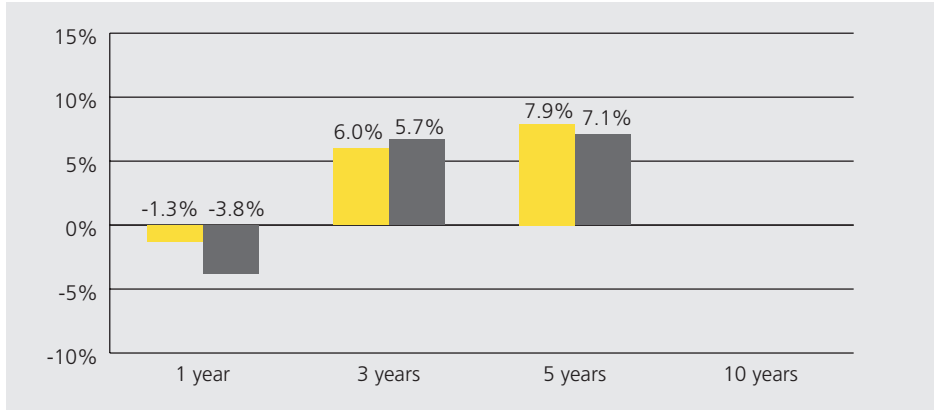
Note: All investment performance figures were calculated using a time-weighted rate of return based on market values.

## INVESTMENT RESULTS

(For the Periods Ending June 30, 2015)

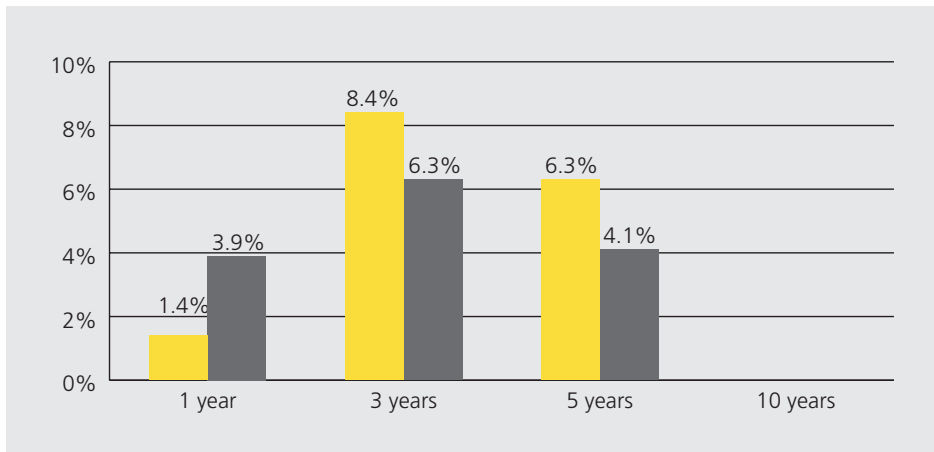
### GLOBAL ASSET ALLOCATION

- GAA
- Benchmark:  
50% MSCI  
World / 50%  
Citi World Govt  
Bond Index



### HEDGE FUND

- Hedge Fund of Funds
- Benchmark:  
HFRI Fund  
of Funds  
Composite  
Index



## SCHEDULES OF TEN LARGEST EQUITY & FIXED INCOME HOLDINGS

(As of June 30, 2015)

### TEN LARGEST EQUITY HOLDINGS\*

No. Shares	Description	Cost	Fair Value	% of Total Portfolio
13,400	AMAZON.COM INC	\$ 4,096,648	\$ 5,816,806	0.27%
65,010	JPMORGAN CHASE & CO	\$ 3,584,690	\$ 4,405,078	0.20%
115,460	PFIZER INC	\$ 3,976,164	\$ 3,871,374	0.18%
36,490	JOHNSON & JOHNSON	\$ 3,633,453	\$ 3,556,315	0.16%
15,800	MCKESSON CORP	\$ 3,232,677	\$ 3,551,998	0.16%
3,050	PRICELINE GROUP INC	\$ 3,656,225	\$ 3,511,678	0.16%
40,100	FACEBOOK INC	\$ 2,998,269	\$ 3,439,176	0.16%
61,300	CITIGROUP INC	\$ 3,271,755	\$ 3,386,212	0.16%
40,100	EXXON MOBIL CORP	\$ 3,375,159	\$ 3,336,320	0.15%
38,400	DANAHER CORP	\$ 3,100,912	\$ 3,286,656	0.15%
<b>TOTAL</b>		<b>\$ 34,925,952</b>	<b>\$ 38,161,613</b>	<b>1.75%</b>

### TEN LARGEST FIXED INCOME HOLDINGS\*

Par Value	Security	Coupon	Maturity	Cost	Fair Value	% of Total Portfolio
8,285,000	U S TREASURY NOTE	0.375%	03/31/2016	\$ 8,280,793	\$ 8,293,451	0.38%
7,000,000	U S TREASURY NOTE	0.500%	06/30/2016	\$ 7,006,016	\$ 7,011,480	0.32%
5,505,000	INTER-AMERICAN DEVELOPMENT BAN	6.000%	12/15/2017	\$ 3,779,204	\$ 3,960,777	0.18%
2,795,000	OLD REPUBLIC INTERNATIONAL COR	3.750%	03/15/2018	\$ 2,743,203	\$ 3,299,861	0.15%
3,355,000	NEW SOUTH WALES TREASURY CORP	6.000%	02/01/2018	\$ 3,785,333	\$ 2,820,533	0.13%
37,450,000	MEXICAN BONOS	8.000%	12/07/2023	\$ 3,347,568	\$ 2,697,097	0.12%
2,400,000	BANK OF AMERICA CORP	6.110%	01/29/2037	\$ 2,064,106	\$ 2,689,968	0.12%
2,190,000	INTEL CORP	2.950%	12/15/2035	\$ 2,161,153	\$ 2,634,855	0.12%
2,495,000	U S TREASURY BOND	3.000%	05/15/2045	\$ 2,416,909	\$ 2,445,100	0.11%
2,295,000	PULTEGROUP INC	6.000%	02/15/2035	\$ 1,961,255	\$ 2,231,888	0.10%
<b>TOTAL</b>				<b>\$37,545,540</b>	<b>\$38,085,010</b>	<b>1.75%</b>

\* A detailed list of the portfolio's equity and fixed income holdings are available upon request.



## SCHEDULE OF BROKERAGE COMMISSIONS

(Year Ended June 30, 2015)

Broker Name	Base Volume	Total Shares	Base Commission	Commission Percentage
INVESTMENT TECHNOLOGY GROUP, NEW YORK	\$118,408,317	1,744,757	\$27,523	0.02
CREDIT SUISSE, NEW YORK (CSUS)	51,876,077	2,672,326	25,738	0.05
DEUTSCHE BK SECS INC, NY (NWSCUS33)	42,413,876	3,359,756	17,194	0.04
MORGAN STANLEY & CO INC, NY	37,001,411	3,774,941	26,292	0.07
CITIGROUP GBL MKTS INC, NEW YORK	36,204,656	1,140,246	22,908	0.06
INSTINET CORP, NY	34,046,333	791,870	9,876	0.03
GOLDMAN SACHS & CO, NY	32,112,855	1,498,675	18,354	0.06
SG AMERICAS SECURITIES LLC, NEW YORK	27,566,951	645,829	6,380	0.02
MERRILL LYNCH PIERCE FENNER SMITH INC NY	23,286,602	547,124	8,736	0.04
LIQUIDNET INC, BROOKLYN	22,098,066	695,119	15,885	0.07
BARCLAYS CAPITAL LE, JERSEY CITY	18,889,332	498,789	7,318	0.04
GOLDMAN SACHS EXECUTION & CLEARING, NY	16,728,105	210,766	2,939	0.02
MERRILL LYNCH INTL LONDON EQUITIES	16,690,608	1,621,975	18,829	0.11
BARCLAYS CAPITAL, LONDON (BARCGB33)	15,941,159	1,976,710	11,922	0.07
MACQUARIE CAPITAL (USA) INC., NEW YORK	15,243,984	230,015	3,450	0.02
JNK SECURITIES INC, NEW YORK	14,731,443	318,260	4,774	0.03
GUZMAN & COMPANY, CORAL GABLES	14,372,347	327,670	4,918	0.03
UBS WARBURG, LONDON	12,972,862	888,858	12,966	0.10
FIDELITY CAP MKTS (DIV OF NFSC), BOSTON	11,823,091	304,120	4,562	0.04
J.P. MORGAN CLEARING CORP, NEW YORK	11,761,039	476,841	4,580	0.04
CITIGROUP GLOBAL MARKETS LTD, LONDON	10,898,536	967,545	7,712	0.07
UBS SECURITIES LLC, STAMFORD	10,471,948	470,752	7,887	0.08
CREDIT SUISSE (EUROPE), LONDON	10,107,456	439,950	7,746	0.08
J P MORGAN SECURITIES INC, BROOKLYN	9,261,032	284,578	8,171	0.09
THEMIS TRADING LLC, JERSEY CITY	8,745,209	165,100	2,054	0.02
STIFEL NICOLAUS	8,075,400	133,225	3,316	0.04
JEFFERIES & CO INC, NEW YORK	8,005,494	227,381	7,942	0.10
CITIGROUP GBL MKTS/SALOMON, NEW YORK	7,788,459	1,170,433	3,883	0.05
BERNSTEIN SANFORD C & CO, NEW YORK	6,822,445	118,236	2,612	0.04
J P MORGAN SECS LTD, LONDON	6,611,408	584,398	5,635	0.09
INVESTMENT TECHNOLOGY GROUP LTD,DUBLIN	6,563,138	582,993	3,144	0.05
UBS WARBURG ASIA LTD, HONG KONG	6,021,668	508,127	4,852	0.08
STATE STREET BROKERAGE SVCS, BOSTON	5,790,266	208,475	3,965	0.07
INSTINET EUROPE LIMITED, LONDON	5,576,853	1,248,482	5,327	0.10
RBC CAPITAL MARKETS LLC, NEW YORK	5,574,801	146,764	2,660	0.05
UBS SECURITIES CANADA, TORONTO (BWIT)	5,335,409	177,362	2,517	0.05
CITATION GROUP/BCC CLRG, NEW YORK	5,312,450	194,910	7,796	0.15
ROSENBLATT SECURITIES LLC, JERSEY CITY	5,195,899	135,150	2,042	0.04
BROCKHOUSE AND COOPER, MONTREAL	4,651,594	179,642	1,949	0.04
CREDIT LYONNAIS SECS, SINGAPORE	4,342,012	254,000	2,328	0.05
MACQUARIE BANK LTD, HONG KONG	4,316,843	1,529,800	2,991	0.07
PERSHING SECURITIES LTD, LONDON	4,294,104	261,698	3,012	0.07
WEEDEN & CO, NEW YORK	3,964,911	101,353	1,690	0.04
BNY CONVERGEX EXECUTION SOL, NEW YORK	3,557,954	118,011	1,875	0.05
SANFORD C. BERNSTEIN & CO, WHITE PLAINS	3,556,563	919,776	2,071	0.06
OTHER BROKERS	113,067,215	11,593,043	123,059	0.11
<b>TOTAL</b>	<b>\$848,078,179</b>	<b>46,445,831</b>	<b>\$483,380</b>	

## INVESTMENT SUMMARY

	AS OF JUNE 30, 2015		AS OF JUNE 30, 2014	
	Fair Value	% Fair Value	Fair Value	% Fair Value
<b>Fixed Income</b>				
U.S. Government obligations	\$ 22,560,732	1.0%	\$ 25,166,149	1.1%
Mortgage-backed securities	2,625,494	0.1%	3,437,784	0.2%
Domestic corporate bonds	59,227,314	2.7%	87,407,536	4.0%
Convertible bonds	11,454,313	0.5%	14,027,290	0.6%
International bonds	30,484,370	1.4%	42,403,411	1.9%
Preferred stocks	3,091,170	0.1%	1,187,335	0.1%
Index / Commingled fund	464,211,454	21.3%	399,926,578	17.9%
<b>Total fixed income</b>	<b>593,654,847</b>	<b>27.1%</b>	<b>573,556,083</b>	<b>25.8%</b>
<b>Domestic Equities:</b>				
Basic industry	44,875,767	2.1%	59,066,021	2.7%
Consumer and services	134,535,826	6.2%	136,124,232	6.2%
Financial and utility	77,984,758	3.6%	70,260,774	3.2%
Technological	87,566,329	4.0%	75,539,999	3.4%
Index / Commingled fund	111,302,312	5.1%	116,082,968	5.3%
<b>Total domestic stock</b>	<b>456,264,992</b>	<b>21.0%</b>	<b>457,073,994</b>	<b>20.8%</b>
<b>International Equity</b>				
Basic industry	63,359,271	2.9%	85,799,455	3.9%
Consumer and services	118,686,548	5.5%	107,578,024	4.9%
Financial and utility	75,213,627	3.5%	83,471,494	3.8%
Technological	51,188,682	2.4%	43,270,418	2.0%
Index / Commingled fund	79,616,541	3.7%	85,329,807	3.9%
<b>Total international stock</b>	<b>388,064,669</b>	<b>18.0%</b>	<b>405,449,198</b>	<b>18.5%</b>
<b>Real Estate</b>				
Commercial	61,728,857	2.8%	54,462,973	2.5%
Commingled	108,246,045	5.0%	115,791,876	5.2%
<b>Total real estate</b>	<b>169,974,902</b>	<b>7.8%</b>	<b>170,254,849</b>	<b>7.7%</b>
<b>Alternative investments</b>				
Better beta	111,714,562	5.1%	112,865,754	5.1%
Global asset allocation	218,806,384	10.0%	223,631,110	10.1%
Hedge fund of funds	174,171,320	8.0%	174,498,284	7.9%
Limited partnerships	47,414,464	2.2%	34,645,625	1.6%
<b>Total alternative investments</b>	<b>552,106,730</b>	<b>25.3%</b>	<b>545,640,773</b>	<b>24.7%</b>
<b>Subtotal investments at fair value</b>	<b>2,160,066,140</b>	<b>99.2%</b>	<b>2,151,974,897</b>	<b>97.5%</b>
<b>Short-term Investments</b>				
Money Market	17,655,629	0.8%	56,058,086	2.5%
<b>Total short-term investments</b>	<b>17,655,629</b>	<b>0.8%</b>	<b>56,058,086</b>	<b>2.5%</b>
<b>Total</b>	<b>\$ 2,177,721,769</b>	<b>100.0%</b>	<b>\$ 2,208,032,983</b>	<b>100.0%</b>

Note: This summary is comprised of investments at fair value and short-term investments.

## SCHEDULE OF INVESTMENT MANAGEMENT FEES

(Year Ended June 30, 2015)

Investment Category	Assets Under Management	Expense
Better beta	\$ 111,714,562	\$ 548,028
Domestic equity managers	486,957,484	1,617,252
Fixed income managers	593,654,841	1,966,731
Global asset allocation managers	218,806,384	1,876,322
Hedge fund of funds	174,171,320	1,759,810
International equity managers	357,372,181	2,125,189
Private equity	47,414,464	1,133,409
Real estate managers	169,974,904	1,529,477
<b>Total</b>	<b>\$ 2,160,066,140</b>	<b>\$ 12,556,219</b>

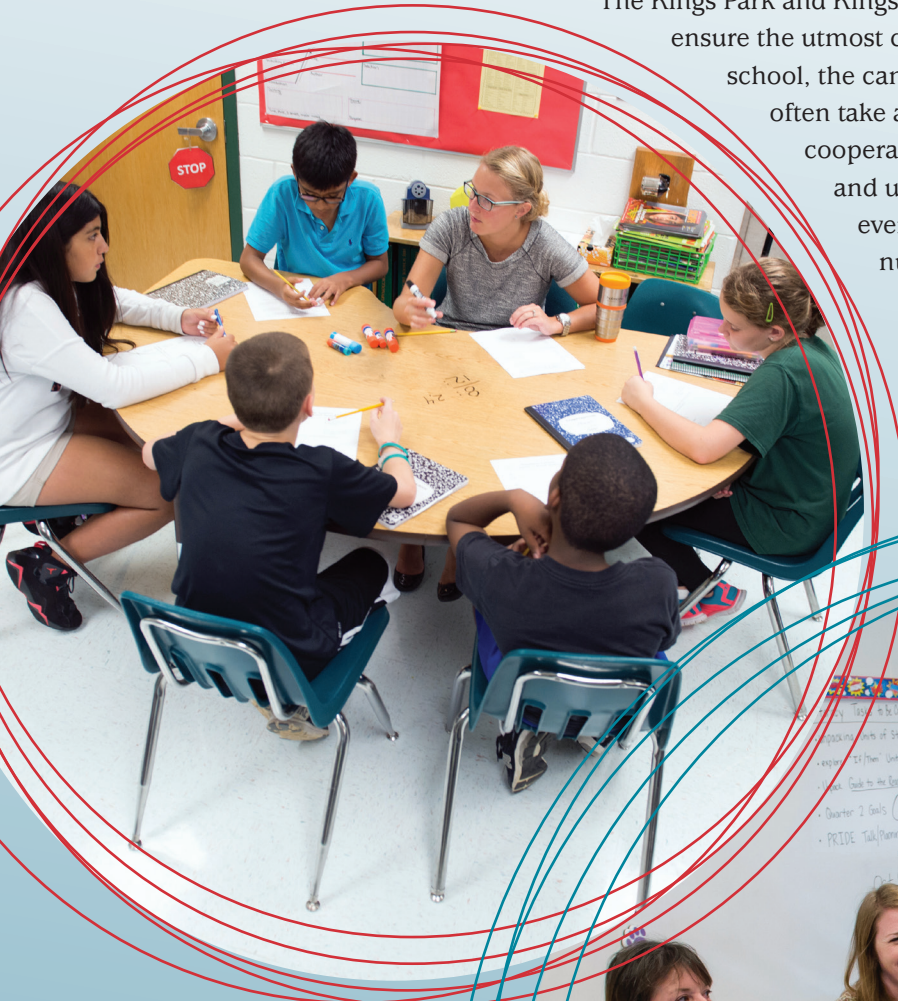
Note: Excludes cash and cash equivalents

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# ACTUARIAL (UNAUDITED)

The Kings Park and Kings Glen administrators and staff work diligently to ensure the utmost collaboration. Referring to themselves as half of one school, the campuses share one Parent Teacher Association and often take advantage of their unique design to engage students in cooperative activities, such as tech blogging between primary and upper grade students. The schools co-host community events and support each other's efforts in the pursuit of nurturing ethical and global citizens.



WE MUST REMEMBER THAT INTELLIGENCE IS NOT ENOUGH.  
INTELLIGENCE PLUS CHARACTER – THAT IS THE GOAL OF TRUE EDUCATION.  
MARTIN LUTHER KING, JR.

## ACTUARY'S CERTIFICATION LETTER



Gabriel Roeder Smith & Company  
Consultants & Actuaries

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Southfield, MI 48076-3723

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www.gabrielroeder.com

October 16, 2015

Board of Trustees  
Educational Employees' Supplementary  
Retirement System of Fairfax County (ERFC)  
8001 Forbes Place, Suite 300  
Springfield, Virginia 22151

Dear Board Members:

The basic financial objective of ERFC is to establish and receive 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 ERFC to present and future retirees and beneficiaries.

The financial objective is addressed within the annual actuarial valuation. The valuation process develops contribution rates that are sufficient to fund the plan's current cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered) as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll over a finite period. The most recent valuation was completed based upon population data, asset data, and plan provisions as of December 31, 2014.

The plan's administrative staff provides the actuary with data for the actuarial valuation. The actuary relies on the data after reviewing it for internal and year-to-year consistency. The actuary summarizes and tabulates population data in order to analyze longer term trends. The plan's external auditor audits the actuarial data annually.

The actuary prepared information for the following schedules for the Comprehensive Annual Financial Report.

#### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Sample Pay Increase Assumptions for an Individual Member
- Probabilities of Retirement for Members Eligible to Retire
- Single Life Retirement Values
- Sample Rates of Separation from Active Employment before Retirement
- Rates of Forfeiture Following Vested Separation

## ACTUARY'S CERTIFICATION LETTER

Board of Trustees  
October 16, 2015  
Page 2

Summary of Member Data Included in Valuation as of December 31, 2014  
Historical Information for All Members (last 8 years)  
All Active Members in Valuation on December 31, 2014 by Attained Age and Years of Service  
Summary of Member Data  
Short-Term Solvency Test  
Analysis of Financial Experience Including Gains and Losses by Risk Area  
Contribution Rates

### Financial Section

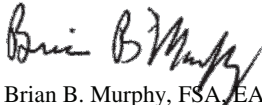
Schedule of Employer Contributions  
Summary of Actuarial Methods and Assumptions  
Schedule of Changes in Net Pension Liability and Related Ratios  
Notes to Schedule of Contributions  
Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

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, subject to a 75% to 125% corridor on market value.

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board after considering the advice of the actuary and other professionals. 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. The December 31, 2014 valuation was based upon assumptions that were recommended in connection with a study of experience during the period from January 1, 2005 to December 31, 2009.

**Based upon the results of the December 31, 2014 valuation, we are pleased to report to the Board that the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC) is meeting its basic financial objective and continues to operate in accordance with actuarial principles of level percent-of-payroll financing.**

Respectfully submitted,



Brian B. Murphy, FSA, EA, FCA, MAAA



Judith A. Kermans, EA, FCA, MAAA

BBM:JAK:clh

Gabriel Roeder Smith & Company

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

The actuarial assumptions and methods used in making the annual actuarial valuation are summarized in this section. The assumptions were adopted by the Trustees following a study of experience covering the five-year period ending December 31, 2009.

### Economic Assumptions

The **investment return rate** used in making the valuation was 7.5 percent per year, compounded annually (net after administrative expenses). The real rate of return is the portion of total investment return, which is more than the wage inflation rate. Based upon an assumed wage inflation rate of 3.75 percent, the 7.5 percent investment return rate translates to an **assumed real rate of return over wages of 3.75 percent**.

**Pay increase assumptions** for individual active members are shown for sample ages on Table A. Part of the assumption for each age is for merit and/or seniority increase, and the other 3.75 percent recognizes wage inflation.

The **number of active members** is assumed to continue at the present number.

**Total active member payroll** is assumed to increase 3.75 percent annually, which is the portion of the individual pay increase assumptions attributable to wage inflation. This assumed increase is recognized in the funding of unfunded actuarial accrued liabilities.

### Non-Economic Assumptions

The **probabilities of retirement** for members eligible to retire are shown on Table C.

The **mortality table** used to measure active and retired life mortality was the 1994 Group Annuity Mortality Table set back 3 years for males and females. Related values are shown on Table D.

The **probabilities of withdrawal** from service, death-in-service, and disability are shown for sample ages on Table B.

The **individual entry age actuarial cost method of valuation** was used for determining actuarial accrued liabilities and normal cost.

Actuarial gains and losses reduce or increase the unfunded liability. The unfunded actuarial accrued liabilities are amortized to produce contribution amounts (principal and interest) which are level percent of payroll contributions.

**Present assets (cash and investments)** are valued on a market-related basis *effective June 30, 1986*. A one time adjustment toward market was made in connection with the 1990–93 experience study and an additional one-time adjustment set the funding value equal to the market value as of December 31, 2004. Further, an 85–115% market value corridor was added in the December 31, 2005 valuation. Additionally, the market value corridor on assets was changed from 75% to 125% in the December 31, 2008 valuation.

The data about persons now covered and about present assets was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

**TABLE A: Sample Pay Increase Assumptions for an Individual Member**

Service Index	PAY INCREASE ASSUMPTION		
	Merit & Seniority	Base (Economy)	Increase Next Year
1	5.30%	3.75%	9.05%
2	3.80%	3.75%	7.55%
3	3.30%	3.75%	7.05%
4	3.10%	3.75%	6.85%
5	2.90%	3.75%	6.65%
6	2.70%	3.75%	6.45%
7	2.70%	3.75%	6.45%
8	2.30%	3.75%	6.05%
9	2.10%	3.75%	5.85%
10-19	1.80%	3.75%	5.55%
20-24	1.00%	3.75%	4.75%
25	0.00%	3.75%	3.75%

**TABLE B: Sample Rates of Separation from Active Employment Before Retirement**

		PERCENT OF ACTIVE MEMBERS SEPARATING WITHIN NEXT YEAR									
		DEATH				DISABILITY				OTHER	
		Ordinary		Duty		Ordinary		Duty			
Sample Ages	Years of Service	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
25	4 & over	0.02%	0.01%	0.00%	0.00%	0.03%	0.02%	0.01%	0.00%	11.20	15.40
30		0.03	0.01	0.00	0.00	0.03	0.02	0.01	0.01	7.60	11.20
35		0.03	0.02	0.00	0.00	0.05	0.04	0.01	0.01	5.40	7.60
40		0.04	0.02	0.00	0.00	0.07	0.06	0.02	0.02	3.80	4.20
45		0.05	0.03	0.01	0.00	0.10	0.09	0.03	0.02	3.00	3.00
50		0.08	0.04	0.01	0.01	0.17	0.15	0.04	0.04	2.00	3.00
55		0.13	0.07	0.02	0.01	0.29	0.25	0.07	0.06	3.20	4.20
60		0.22	0.12	0.03	0.01	0.49	0.35	0.12	0.09	4.00	5.00

Rates of separation for members with less than 4 years of service are assumed to be 16% in the first year, 13% in the second and third years for men, and 14% in the second and third years for women.

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

**TABLE C: Probability of Retirement for Members Eligible to Retire**

<i>ERFC (Hired before 7/1/2001)</i>			<i>ERFC 2001 (Hired on or after 7/1/2001)</i>		
TYPE OF RETIREMENT			TYPE OF RETIREMENT		
Ages	Service	Reduced Service	Age Based	Service	Service Based
45		2%			
46		2			
47		2			
48		2			
49		2			
50		2			
51		3			
52		6			
53		8			
54		8			
55	45%	9	22.5%	30	22.5%
56	35	4	17.5	31	17.5
57	25	4	12.5	32	12.5
58	25	4	12.5	33	12.5
59	25	4	12.5	34	12.5
60	30	8	15.0	35	15.0
61	35	9	17.5	36	17.5
62	35	15	17.5	37	17.5
63	30	18	15.0	38	35.0
64	25	18	12.5	39	50.0
65	25		12.5	40 & up	100
66	25		12.5		
67	25		25.0		
68	25		25.0		
69	20		20.0		
70	20		20.0		
71	20		20.0		
72	20		20.0		
73	30		30.0		
74	30		30.0		
75	100		100		
76	100		100		
77	100		100		
78	100		100		
79	100		100		
80	100		100		

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

**TABLE D: Single Life Retirement Values**

<b>STANDARD MORTALITY</b>				
<b>Sample Attained Ages</b>	<b>Present Value of \$1 Monthly for Life Increasing 3% Annually</b>		<b>Future Life Expectancy (years)</b>	
	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
55	\$ 187.03	\$ 201.44	28.85	32.99
60	169.63	185.77	24.39	28.31
65	150.45	167.93	20.18	23.82
70	130.51	148.72	16.37	19.65
75	110.33	128.05	12.98	15.78
80	89.95	106.03	9.96	12.22

<b>DISABLED MORTALITY</b>				
<b>Sample Attained Ages</b>	<b>Present Value of \$1 Monthly for Life Increasing 3% Annually</b>		<b>Future Life Expectancy (years)</b>	
	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
55	\$ 128.18	\$ 144.69	17.14	20.34
60	118.67	135.13	15.18	18.04
65	110.09	124.28	13.46	15.71
70	99.71	111.14	11.60	13.27
75	86.55	94.59	9.55	10.66
80	70.31	76.55	7.37	8.16

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

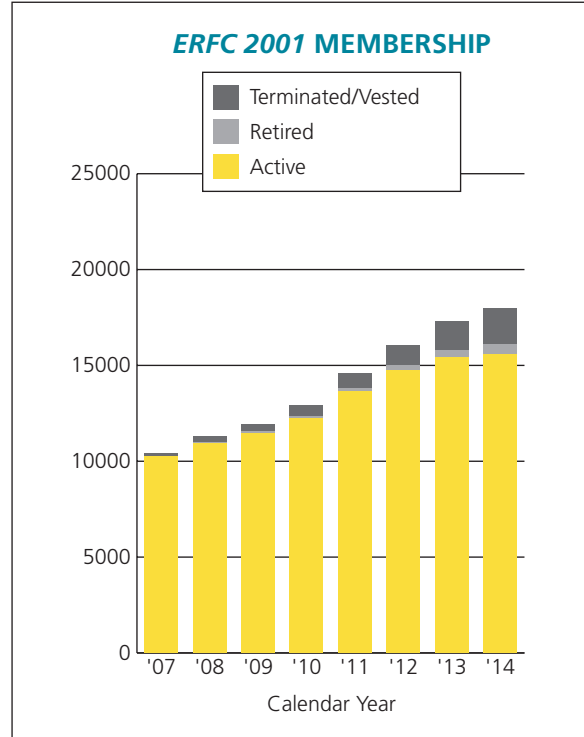
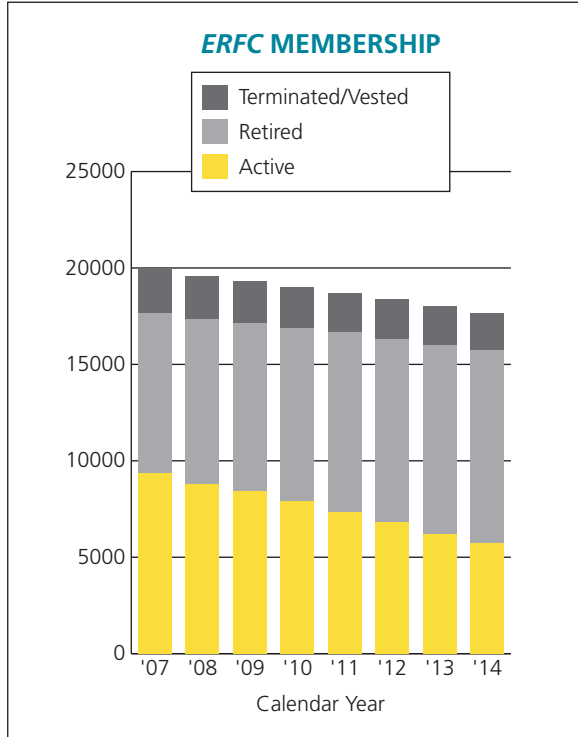
**TABLE E: Rates of Forfeiture Following Vested Separation**

Forfeiture occurs when a vested person separates from service and withdraws contributions thereby forfeiting future rights to an employer financed benefit. The total probability of forfeiture is obtained by multiplying the probability of “other separation” from Table B by the probability of forfeiture from this table. The table does not apply to individuals who are eligible for retirement at the time of termination.

Age at Separation	SAMPLE ENTRY AGE				
	25	30	35	40	45
30	0.5000				
31	0.4750				
32	0.4500				
33	0.4250				
34	0.4000				
35	0.3750	0.5000			
36	0.3500	0.4667			
37	0.3250	0.4333			
38	0.3000	0.4000			
39	0.2750	0.3667			
40	0.2500	0.3333	0.5000		
41	0.2250	0.3000	0.4500		
42	0.2000	0.2667	0.4000		
43	0.1750	0.2333	0.3500		
44	0.1500	0.2000	0.3000		
45	0.1250	0.1667	0.2500	0.5000	
46	0.1000	0.1333	0.2000	0.4000	
47	0.0750	0.1000	0.1500	0.3000	
48	0.0500	0.0667	0.1000	0.2000	
49	0.0250	0.0333	0.0500	0.1000	
50	0.0000	0.0000	0.0000	0.0000	0.0000

## SUMMARY OF MEMBER DATA

(Last Eight Years)



Year	ERFC			ERFC 2001			Total
	Active	Retired	Terminated/ Vested	Active	Retired	Terminated/ Vested	
Calendar Year 2007	9,350	8,333	2,249	10,249	21	157	30,359
(As of December 31) 2008	8,791	8,556	2,243	10,940	39	317	30,886
2009	8,417	8,707	2,177	11,474	65	390	31,230
2010	7,900	8,968	2,137	12,241	113	582	31,941
2011	7,353	9,293	2,063	13,623	174	798	33,304
2012	6,801	9,524	2,029	14,718	264	1,070	34,406
2013	6,221	9,776	2,009	15,422	380	1,500	35,308
2014	5,754	10,006	1,917	15,598	518	1,844	35,637

## SUMMARY OF MEMBER DATA

(As of December 31, 2014)

### ACTIVE ERFC MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE

Age Group	YEARS OF SERVICE TO VALUATION DATE							TOTALS		Average
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary	
30-34			4					4	\$235,165	\$58,791
35-39	3	20	182	90				295	21,951,943	74,413
40-44	4	52	223	469	60			808	66,008,650	81,694
45-49	7	47	204	404	297	38	2	999	83,589,561	83,673
50-54	6	23	190	331	270	225	32	1,077	89,179,865	82,804
55-59	2	18	157	404	281	159	55	1,076	86,076,497	79,997
60	1	2	41	89	65	40	7	245	19,700,408	80,410
61		2	36	91	43	25	11	208	16,126,242	77,530
62		2	35	78	65	28	7	215	16,474,383	76,625
63		2	29	83	38	30	13	195	15,105,674	77,465
64		1	19	69	43	14	8	154	12,186,463	79,133
65			20	64	32	23	10	149	11,648,191	78,176
66			7	43	29	15	7	101	7,610,764	75,354
67		1	17	19	10	9	3	59	4,523,472	76,669
68			7	16	14	11	1	49	3,583,557	73,134
69			2	8	16	4	1	31	2,768,643	89,311
70			5	8	5	4		22	1,521,496	69,159
71			1	5	6	2	2	16	1,273,197	79,575
72			4	5	4	1	5	19	1,669,006	87,842
73				1	2	2	4	9	665,781	73,976
74			2	2	4		3	11	756,373	68,761
75 & over				5	2	5		12	675,835	56,320
<b>Total</b>	<b>23</b>	<b>170</b>	<b>1,185</b>	<b>2,284</b>	<b>1,286</b>	<b>635</b>	<b>171</b>	<b>5,754</b>	<b>\$463,331,166</b>	<b>\$80,523</b>

**SUMMARY OF MEMBER DATA**

(As of December 31, 2014)

**ACTIVE ERFC 2001 MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE**

Age Group	YEARS OF SERVICE TO VALUATION DATE				TOTALS		Average
	0-4	5-9	10-14	15 & up	No.	Salary	
15-19	1				1	\$20,615	\$20,615
20-24	522				522	22,832,035	43,740
25-29	2,613	234			2,847	141,713,018	49,776
30-34	1,406	1,327	193		2,926	163,531,164	55,889
35-39	751	684	669		2,104	128,554,563	61,100
40-44	715	505	414		1,634	99,455,622	60,866
45-49	703	531	341		1,575	92,188,828	58,533
50-54	650	609	404		1,663	91,911,402	55,268
55-59	338	492	444		1,274	73,324,712	57,555
60	42	75	83		200	12,313,169	61,566
61	37	62	92		191	11,635,608	60,919
62	28	57	56		141	8,484,391	60,173
63	21	45	55		121	7,338,086	60,645
64	19	30	48		97	5,788,113	59,671
65	14	38	47		99	6,101,762	61,634
66	8	25	36		69	4,097,950	59,391
67	8	16	15		39	2,034,713	52,172
68	8	8	16		32	2,033,849	63,558
69	4	6	3		13	749,204	57,631
70	4	8	6		18	952,921	52,940
71		3	9		12	883,548	73,629
72	3	4	2		9	484,993	53,888
73		4	3		7	349,212	49,887
74	1	1			2	113,558	56,779
75 & over			2		2	119,464	59,732
<b>Total</b>	<b>7,895</b>	<b>4,763</b>	<b>2,936</b>	<b>-</b>	<b>15,598</b>	<b>\$877,012,500</b>	<b>\$56,226</b>

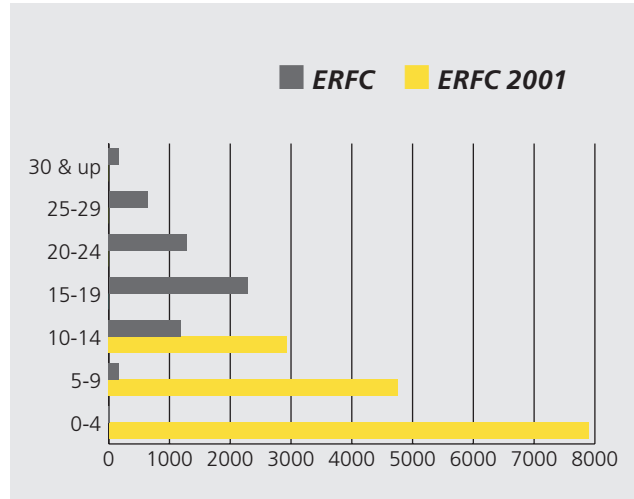
## SUMMARY OF MEMBER DATA

(As of December 31, 2014)

### ACTIVE MEMBER YEARS OF SERVICE

Average Service = 9.2 years

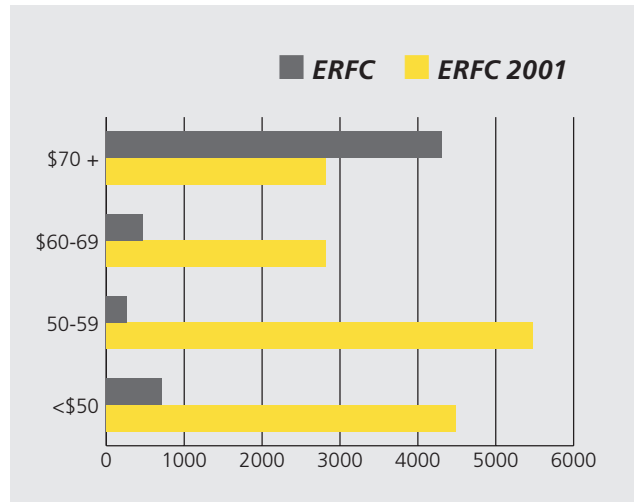
	0-4	5-9	10-14	15-19	20-24	25-29	30 & up
<i>ERFC</i>	23	170	1,185	2,284	1,286	635	171
<i>ERFC 2001</i>	7,895	4,763	2,936	-	-	-	-



### ACTIVE MEMBER SALARIES (\$ in thousands)

Average Annual Pay = \$62,774

	< \$ 50	\$ 50-59	\$ 60-69	\$ 70+
<i>ERFC</i>	714	261	468	4,311
<i>ERFC 2001</i>	4,487	5,472	2,819	2,820

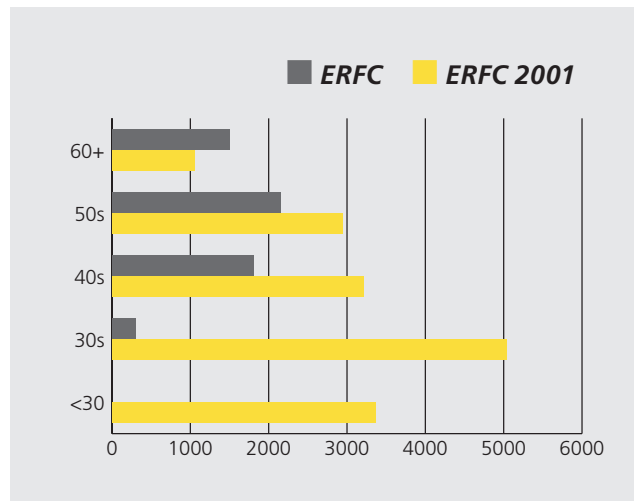


### ACTIVE MEMBER AGES

Average Age = 43.7 years

Total Active Members = 21,352

	<30	30's	40's	50's	60+
<i>ERFC</i>	0	299	1,807	2,153	1,495
<i>ERFC 2001</i>	3,370	5,030	3,209	2,937	1,052





## SUMMARY OF MEMBER DATA

(Last Eight Years)

### ACTIVE MEMBER VALUATION DATA

Valuation Date	Annual Number	Annual Payroll	Annual Average Pay	% Increase in Avg. Annual Pay
December 31, 2007	19,599	\$ 1,161,431,668	\$ 59,260	3.2
December 31, 2008	19,731	\$ 1,211,140,009	\$ 61,383	3.6
December 31, 2009	19,891	\$ 1,208,092,606	\$ 60,735	(1.1)
December 31, 2010	20,141	\$ 1,191,290,190	\$ 59,148	(2.6)
December 31, 2011	20,976	\$ 1,246,973,240	\$ 59,448	0.5
December 31, 2012	21,519	\$ 1,297,536,507	\$ 60,297	1.4
December 31, 2013	21,643	\$ 1,320,308,508	\$ 61,004	1.2
December 31, 2014	21,352	\$ 1,340,343,666	\$ 62,774	2.9

### RETIREES AND BENEFICIARIES ADDED AND REMOVED

ADDED TO PAYROLL			REMOVED FROM PAYROLL		PAYROLL AT END OF YEAR			
Year	Number	Annualized Monthly Benefit	Number	Annualized Monthly Benefit	Number	Annualized Monthly Benefit	Average Annualized Monthly Benefit	% Increase in Monthly Benefit
As of December 31								
2007	539	\$ 727,585	214	\$ 129,189	8,354	\$ 10,705,991	\$ 1,282	5.74
2008	461	\$ 660,186	220	\$ 147,638	8,595	\$ 11,189,751	\$ 1,302	4.52
2009	426	\$ 596,102	249	\$ 162,485	8,772	\$ 11,565,358	\$ 1,318	3.36
2010	563	\$ 774,606	254	\$ 170,078	9,081	\$ 11,916,352	\$ 1,312	3.03
2011	629	\$ 851,853	243	\$ 169,704	9,467	\$ 12,410,208	\$ 1,311	4.14
2012	636	\$ 821,485	315	\$ 194,842	9,788	\$ 12,867,671	\$ 1,315	3.69
2013	653	\$ 773,322	285	\$ 230,145	10,156	\$ 13,065,714	\$ 1,287	1.54
2014	629	\$ 738,766	261	\$ 213,231	10,524	\$ 13,206,280	\$ 1,255	1.08

## SHORT-TERM SOLVENCY TEST

If the contributions to ERFEC are level in concept and soundly executed, the System **will pay all promised benefits when due — the ultimate test of financial soundness**. Testing for level contribution rates is the **long-term test**.

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

- 1) Active member contributions on deposit,
- 2) The liabilities for future benefits to present retired lives, and

- 3) The liabilities for service already rendered by active members.

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

AGGREGATE ACTUARIAL ACCRUED LIABILITIES							
Last 20 years							
Valuation Date	(1)	(2)	(3)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
	Member Contributions	Retirees and Beneficiaries	Members (Employer Financed Portion)		(1)	(2)	(3)
	(\$ in thousands)						
* 6/30/1995	\$ 143,150	\$ 395,249	\$ 534,137	\$ 839,930	100	100	56
6/30/1996	146,228	436,181	548,135	934,572	100	100	64
6/30/1997	144,063	464,345	606,959	1,045,412	100	100	72
# 6/30/1998	149,261	490,261	638,891	1,194,556	100	100	87
6/30/1999	154,582	539,917	651,160	1,365,417	100	100	103
6/30/2000	157,148	614,739	595,484	1,505,231	100	100	123
6/30/2001	178,564	667,605	674,857	1,599,219	100	100	112
* 6/30/2001	178,564	667,605	706,389	1,599,219	100	100	107
6/30/2002	170,849	699,251	823,856	1,619,889	100	100	91
* 6/30/2003	176,648	903,963	691,807	1,597,459	100	100	75
# 12/31/2004	227,725	1,083,988	623,869	1,643,020	100	100	53
12/31/2005	257,142	1,130,378	635,442	1,718,399	100	100	52
12/31/2006	239,780	1,176,979	688,793	1,818,930	100	100	58
12/31/2007	269,404	1,221,969	695,428	1,924,886	100	100	62
@ 12/31/2008	302,910	1,237,613	714,775	1,733,946	100	100	27
12/31/2009	342,663	1,264,675	706,944	1,769,540	100	100	23
# 12/31/2009	342,663	1,314,885	682,321	1,769,540	100	100	16
@ 12/31/2010	374,086	1,355,093	654,882	1,822,603	100	100	14
* 12/31/2011	402,847	1,401,877	666,240	1,866,952	100	100	9
12/31/2012	426,609	1,448,291	691,228	1,935,292	100	100	9
12/31/2013	439,310	1,482,770	723,420	2,029,005	100	100	15
12/31/2014	457,591	1,510,717	765,537	2,123,910	100	100	20

@ After change in asset valuation method. \* After change in benefits or contribution rates. # After changes in actuarial assumptions.

## ANALYSIS OF FINANCIAL EXPERIENCE

**Pay Increases.** If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.

**Investment Return.** If there is a greater investment return than assumed, there is a gain. If smaller return, a loss.

**Age & Service Retirement.** If members retire at older ages than assumed, there is a gain. If at younger ages, a loss.

**Disability & Death in Service.** If disability claims are less than assumed, there is a gain. If claims are more, a loss. If survivor claims are less than assumed, there is a gain. If claims are more, a loss.

**Other Separations.** If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.

### EXPERIENCE GAINS AND LOSSES BY RISK AREA

(Dollars in Millions)

Experience Period	ECONOMIC RISK AREA			DEMOGRAPHIC RISK AREA			TOTAL GAIN (LOSS)	
	Pay Increases	Investment Return	Age and Service Retirement	Disability and Death-in Service	Other Separations	Other	Amount	Percent of Liabilities
For Periods Ending June 30								
1995-96	\$ (7.7)	\$ 45.4	\$ 4.1	\$ (1.8)	\$ (5.6)	\$ 4.3	\$ 38.7	3.6%
1996-97	9.9	53.5	2.9	(1.7)	(4.5)	(8.7)	51.4	4.5
#1997-98	(2.6)	81.1	5.9	(0.5)	6.4	(13.9)	76.4	6.3
*1998-99	(8.4)	95.4	0.3	(1.0)	6.5	(3.8)	89.0	7.0
1999-00	(17.6)	62.3	3.8	(1.2)	12.9	38.9	99.1	7.4
2000-01	(9.1)	17.6	(0.3)	(1.0)	13.0	(19.5)	0.7	0.0
2001-02	3.0	(50.4)	3.5	(1.1)	2.6	(29.9)	(72.3)	(4.7)
2002-03	18.5	(92.5)	11.0	(0.3)	4.0	(23.3)	(82.6)	(4.9)
.....								
For Periods Ending December 31								
@2003-04	<i>Due to transition to calendar year valuations, a gain/loss analysis was not conducted for this valuation period.</i>							
#2005	(7.1)	1.9	1.0	0.1	0.0	(3.2)	(7.3)	(0.4)
2006	(4.7)	23.6	2.0	0.0	(0.8)	2.6	22.7	1.1
2007	10.0	25.1	1.9	(0.2)	(2.2)	(7.2)	27.4	1.4
2008	4.1	(277.5)	5.2	(0.4)	(4.0)	13.5	(259.1)	(11.8)
2009	45.0	(34.6)	8.8	(0.8)	(10.0)	(11.6)	(3.2)	(0.1)
#2010	53.1	(16.9)	5.2	0.2	(5.3)	(4.2)	32.1	1.4
2011	18.8	(30.6)	5.3	(0.2)	(4.2)	(4.8)	(15.7)	(0.7)
2012	12.3	(10.8)	4.6	(0.3)	(3.4)	(10.2)	(7.8)	(0.3)
2013	16.6	7.6	5.7	0.0	2.9	(5.1)	27.7	1.1
2014	8.5	(2.8)	5.8	(0.1)	0.6	2.8	14.8	0.6

# Experience Study

\* Updated Gain Formulas

@ Gain Loss analysis not performed

## SUMMARY OF BENEFIT PROVISIONS

Available to a Member Retiring with Some Service Before July 1, 1988 (*ERFC* Members)

### **Service Retirement: Alternate Amount**

#### **After Social Security Normal Retirement Age.**

By election at time of retirement, a member with service before July 1, 1988, may elect to receive 1988 new benefits with a special alternate amount for payment periods after the age the member becomes eligible for full Social Security benefits. The alternate amount is 103 percent of the total of:

- 1) the amount payable under June 30, 1987 benefit provisions,
- 2) plus, if the retiring member is younger than age 65 and if creditable Virginia service is less than 30 years, 1.65 percent of VRS average final compensation in excess of \$1,200, multiplied by years of creditable Virginia service, and further multiplied by a certain percent based upon the number of months that retirement occurs before reaching the earlier of the above two conditions; such percent is half of one percent for each of the first 60 such months and 4/10 of one percent for each of the next 60 such months, if any.

**Reduced Service Retirement: With 25 Years Service.** By election at time of retirement, such a member may elect to receive 103 percent of the following combination of benefits:

- **To age 55**, 2.85 percent of the 3-year average annual salary multiplied by years of credited service, then actuarially reduced to reflect retirement age younger than age 55; and
- **From age 55 to Social Security Normal Retirement Age**, the amount to age 55 reduced by: 1.65 percent of the portion of VRS average final compensation in excess of \$1,200, multiplied by applicable years of creditable Virginia service; provided if creditable Virginia service is less than 30 years, the result of such multiplication shall be actuarially reduced for each month before the earlier of (1) attainment of age 65, and (2) the date when 30 years service would have been completed; and
- **From Social Security Normal Retirement Age for life**, the amount payable at age 65 according to June 30, 1987 provisions or the amount payable at age 65 according to July 1, 1988 provisions.

## SUMMARY OF BENEFIT PROVISIONS

For a Person Becoming a Member after July 1, 1988 but Before July 1, 2001 (*ERFC* Members)

**Service Retirement: Eligibility.** A member may retire any time after reaching the service retirement date, which is either (i) age 65 with 5 years service or (ii) age 55 with 25 years of service.

**Service Retirement: Amount.** For payment periods during the retired member's lifetime 103 percent times (i) minus (ii) where:

- (i) means 1.85 percent of the 3-year highest consecutive average annual salary (FAC) multiplied by years of credited service, and
- (ii) means 1.65 percent of the portion of VRS FAC in excess of \$1,200, multiplied by applicable years of creditable Virginia service; provided if the member is younger than age 65 and if creditable Virginia service is less than 30 years, the result of such multiplication shall be reduced for each month before the earlier of:
  - 1) attainment of age 65, and
  - 2) the date when 30 years service would have been completed.

For payment periods, if any, before the age the member becomes eligible for full Social Security benefits, an additional temporary benefit equal to 1 percent of the FAC multiplied by years of credited service.

**Reduced Service Retirement: Eligibility.** A member with 25 years service but younger than age 55 may retire after age 45. A member with less than 25 years service and younger than age 65 may retire after age 55.

**Reduced Service Retirement: Amount After 25 Years Service.** Service Retirement amount reduced to reflect retirement age younger than age 55.

**Reduced Service Retirement: Amount After 5-24 Years Service.** For payment periods during the retired member's lifetime, the Service Retirement amount payable at age 65 reduced to reflect that the retirement age younger than

age 65. For payment periods before the age the member becomes eligible for full Social Security benefits, an additional temporary benefit equal to the Service Retirement temporary benefit reduced to reflect that the retirement age is younger than age 65.

**Disability Retirement:** An active member with 5 or more years of service who becomes totally and permanently disabled may be retired and receive a disability pension. The 5 year service requirement is waived if the disability is service-connected.

The amount is 103 percent times a lifetime pension equal to 0.25 percent of the FAC multiplied by years of credited service. Credited service shall be increased by the time period from disability retirement to the date when member would have reached service retirement date. The minimum pension payable is 2.5 percent of FAC.

**Death-in-Service Benefits:** An active member with 5 or more years of service who dies will have benefits payable to the surviving spouse or other eligible beneficiary. The 5 year service requirement is waived if the death is service-connected.

**Deferred Retirement:** Calculated in the same manner as reduced service retirement.

**Member Contributions:** Members contribute 3 percent of their salaries. Interest credits of 5 percent are added annually. If a member leaves covered employment before becoming eligible to retire, accumulated contributions are returned upon request.

*Before July 1, 2001, continued on next page*

*Before July 1, 2001, continued from previous page*

**Post-Retirement Increases:** On March 31, most pensions are increased by 3 percent. These increases are compounded each year. Pensions of members or beneficiaries who retired in the immediately preceding calendar year are increased by 1.489 percent ( $\frac{1}{2}$  of a year's increase).

**Lifetime Level Benefit:** Members retiring after July 1, 2004 are eligible for a lifetime level benefit (LLB) that is calculated by determining

the annuitized value of the greater of their accumulated contribution balance or the present value of the currently provided benefit.

**Optional Forms of Payment:**

- Option A — 100% joint and survivor.
- Option B — 50% joint and survivor.
- Option C — 10 years certain and life.
- Option D — Single sum payment not exceeding member's accumulated contribution balance, plus a single life annuity actuarially reduced from the pension amount otherwise payable.

## SUMMARY OF BENEFIT PROVISIONS

For a Person Becoming a Member July 1, 2001 or Later (*ERFC 2001* Members)

**Service Retirement: Eligibility.** A member may retire any time after reaching the service retirement date, which is either (i) age 60 with 5 years service or (ii) any age with 30 years of service.

**Service Retirement: Amount.** For payment periods during the retired member's lifetime.

The amount is a lifetime pension equal to 0.8 percent of the 3-year average annual salary multiplied by years of credited service.

**Death-in-Service Benefits:** An active member with 5 or more years of service who dies will have benefits payable to the nominated beneficiary.

The amount is a pension equal to the straight life amount (0.8 percent of the 3-year average annual salary multiplied by years of credited service at date of death), reduced in accordance with an option A election and payable at age 60. Beneficiaries may elect to receive benefits before age 60 if benefits are further reduced as follows:

- an additional reduction of the smaller of
  - 1)  $\frac{1}{2}$  of 1 percent for the first 60 months and  $\frac{4}{10}$  of 1 percent for each additional month between the member's age at the date of death and age 60, and

- 2)  $\frac{1}{2}$  of 1 percent for the first 60 months and  $\frac{4}{10}$  of 1 percent for each additional month between the member's service at the date of death and 30 years.

**Deferred Retirement:** An inactive member with 5 or more years of service will be entitled to a pension with payments beginning at age 60, provided she/he does not withdraw accumulated member contributions.

The amount is a pension equal to the straight life amount (0.8 percent of the 3-year average annual salary multiplied by years of credited service at termination date), payable at age 60.

**Member Contributions:** Members contribute 3 percent of their salaries. Interest credits of 5 percent are added annually. If a member leaves covered employment before becoming eligible to retire, accumulated contributions are returned upon request.

**Post-Retirement Increases:** On March 31, most pensions are increased by 3 percent. These increases are compounded each year. Pensions of members or beneficiaries who retired in the immediately preceding calendar year are increased by 1.489 percent.

## ERFC CONTRIBUTION RATES

(Last 20 Years)

SUPPORT EMPLOYEES				INSTRUCTIONAL EMPLOYEES		
Fiscal Year	Employee	Employer	Total	Employee	Employer	Total
1996	2.00 %	5.08 %	7.08 %	2.00 %	5.53 %	7.53 %
1997	2.00	5.58	7.58	2.00	6.03	8.03
1998	2.00	5.58	7.58	2.00	6.03	8.03
1999	2.00	5.58	7.58	2.00	6.03	8.03
<i>ERFC began using composite rates effective July 1, 1999</i>						
2000	2.00	4.99	6.99			
2001	2.00	3.69	5.69			
2002	2.00	3.69	5.69			
2003	2.00	4.00	6.00			
2004						
7/1 to 5/30	2.00	4.29	6.29			
6/1 to 6/30	4.00	2.53	6.53			
2005	4.00	3.37	7.37			
2006	4.00	3.37	7.37			
2007	4.00	3.37	7.37			
2008	4.00	3.37	7.37			
2009	4.00	3.37	7.37			
2010	4.00	3.20	7.20			
2011	4.00	4.04	8.04			
2012	4.00	4.34	8.34			
2013	3.00	5.34	8.34			
2014	3.00	5.60	8.60			
2015	3.00	5.60	8.60			

## SUMMARY OF PLAN CHANGES

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There were no significant plan changes during the valuation period ending December 31, 2014.



# STATISTICAL (UNAUDITED)

Administrators at both Kings Park and Kings Glen express great pride in the staying power of their staffs. With a student population exceeding 700 at KP and 400 at KG, the schools have experienced very little staff turnover in recent years. How has the elementary family maintained a consistent staff of over 135 between both schools? Kings Park principal, Dotty Lin, strives to encourage teacher leadership but not leadership in isolation. Kings Glen principal, Sam Elson, stresses his philosophy that teachers should be the principals of their classrooms. Both administrators agree wholeheartedly that they are available for whatever their staffs may need but their primary responsibility is to serve in their support.

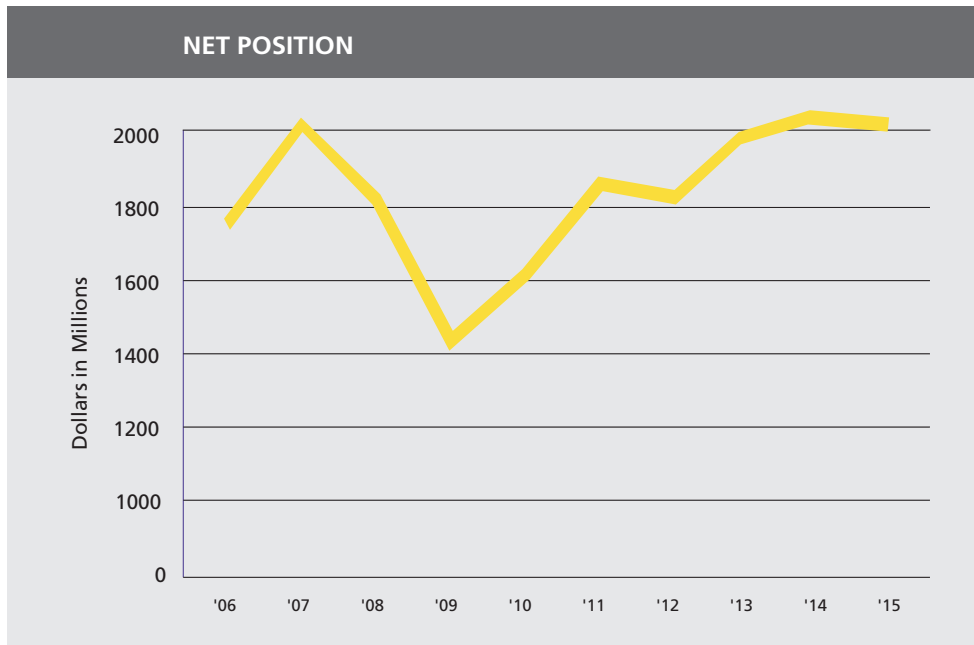


EDUCATION IS THE MOST POWERFUL WEAPON WHICH YOU CAN USE TO CHANGE THE WORLD. NELSON MANDELA

## NET POSITION

Last 10 Fiscal Years

FISCAL YEARS	NET POSITION
2006	\$ 1,766,534,921
2007	\$ 2,015,738,092
2008	\$ 1,858,571,973
2009	\$ 1,441,434,430
2010	\$ 1,607,663,423
2011	\$ 1,886,968,119
2012	\$ 1,827,768,322
2013	\$ 1,956,772,826
2014	\$ 2,204,927,191
2015	\$ 2,179,724,057

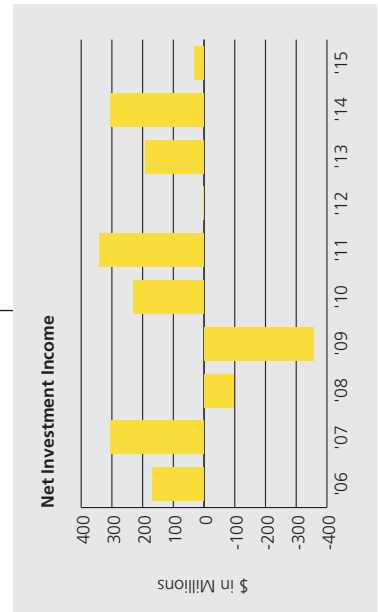


## CHANGES IN NET POSITION

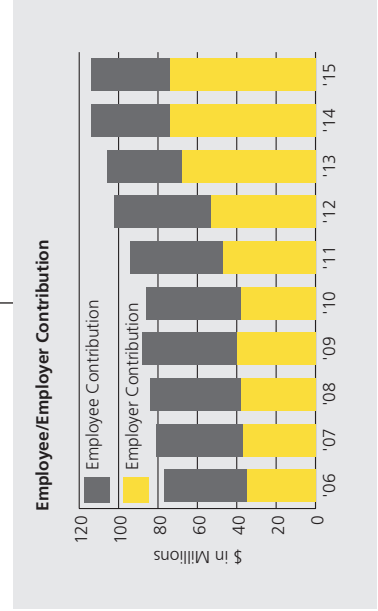
Last 10 Fiscal Years

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>ADDITIONS</b>										
Employee contributions	\$ 42,292,828	\$ 44,453,617	\$ 46,143,803	\$ 47,996,408	\$ 47,918,341	\$ 47,167,129	\$ 49,142,379	\$ 38,428,367	\$ 40,018,590	\$ 39,982,963
Employer contributions	34,648,918	36,644,001	38,334,140	40,012,480	37,868,623	47,118,111	52,934,245	67,734,634	74,174,082	74,324,396
Investment income (net of expenses)	169,944,356	304,119,327	(96,855,060)	(357,672,266)	231,574,404	341,669,367	1,635,435	190,947,851	304,640,803	32,083,908
Gain/loss from sale of capital assets	—	27,632	—	(5,494)	—	(1,503)	—	—	—	—
<b>Total additions to plan net position</b>	<b>246,886,102</b>	<b>385,244,577</b>	<b>(12,377,117)</b>	<b>(269,668,872)</b>	<b>317,361,368</b>	<b>435,953,104</b>	<b>103,712,059</b>	<b>297,110,852</b>	<b>418,833,475</b>	<b>146,391,267</b>
<b>DEDUCTIONS</b>										
Benefit payments	121,687,318	128,739,638	135,927,308	139,594,144	143,128,569	149,046,042	155,041,762	160,098,128	161,276,831	162,145,265
Contribution refunds	3,087,501	3,585,007	4,229,850	5,975,907	3,539,910	4,258,033	4,295,171	4,419,806	5,772,959	5,697,311
Administrative expenses	3,289,518	3,718,761	4,631,844	3,898,620	4,663,896	3,344,333	3,574,923	3,588,414	3,629,320	3,751,825
<b>Total deductions to plan net position</b>	<b>128,064,337</b>	<b>136,041,406</b>	<b>144,789,002</b>	<b>147,468,671</b>	<b>151,132,375</b>	<b>156,648,408</b>	<b>162,911,856</b>	<b>168,106,348</b>	<b>170,679,110</b>	<b>171,594,401</b>
<b>Change in net position net of expenses</b>	<b>\$ 118,821,765</b>	<b>\$ 249,203,171</b>	<b>\$ (157,166,119)</b>	<b>\$ (417,137,543)</b>	<b>\$ 166,228,993</b>	<b>\$ 279,304,696</b>	<b>\$ (59,199,797)</b>	<b>\$ 129,004,504</b>	<b>\$ 248,154,365</b>	<b>\$ (25,203,134)</b>

ADDITIONS BY SOURCE



DEDUCTIONS BY TYPE



## ASSETS AND LIABILITIES COMPARATIVE STATEMENT

Last 20 Years—Dollars in Thousands

Valuation Date	Active Member Payroll	COMPUTED LIABILITIES			Valuation Assets	[Excess of Assets] Unfunded Accrued Liabilities	Funded Percent
		Retired	Members	Total			
* 6/30/1995	\$ 521,044	\$ 395,249	\$ 677,287	\$ 1,072,536	\$ 839,930	\$ 232,606	78.3 %
6/30/1996	531,060	436,181	694,363	1,130,544	934,571	195,973	82.7
6/30/1997	553,709	464,345	751,022	1,215,367	1,045,412	169,955	86.0
# 6/30/1998	582,755	490,261	788,111	1,278,372	1,194,556	83,816	93.4
6/30/1999	626,015	539,917	805,742	1,345,659	1,365,417	(19,758)	101.5
6/30/2000	678,937	614,739	752,632	1,367,371	1,505,231	(137,860)	110.1
* 6/30/2001	759,906	667,605	884,953	1,552,558	1,599,219	(46,661)	103.0
6/30/2002	781,756	699,251	994,705	1,693,956	1,619,889	74,067	95.6
* 6/30/2003	866,502	903,963	868,455	1,772,418	1,597,459	174,959	90.1
12/31/2004	977,817	1,043,677	853,565	1,897,242	1,640,216	257,026	86.5
# 12/31/2004	977,817	1,083,988	851,594	1,935,582	1,643,020	292,562	84.9
12/31/2005	1,050,271	1,130,378	892,584	2,022,962	1,718,399	304,563	84.9
12/31/2006	1,111,828	1,176,979	928,573	2,105,552	1,818,930	286,662	86.4
12/31/2007	1,161,432	1,221,969	964,832	2,186,801	1,924,886	261,915	88.0
@ 12/31/2008	1,211,140	1,237,613	1,017,685	2,255,298	1,733,946	521,352	76.9
12/31/2009	1,208,093	1,264,675	1,049,607	2,314,282	1,769,540	544,742	76.5
# 12/31/2009	1,208,093	1,314,885	1,024,984	2,339,869	1,769,540	570,329	75.6
12/31/2010	1,191,290	1,355,093	1,028,968	2,384,061	1,822,603	561,458	76.5
* 12/31/2011	1,246,973	1,401,887	1,069,087	2,470,964	1,866,952	604,012	75.6
12/31/2012	1,297,537	1,448,291	1,117,837	2,566,128	1,935,292	630,836	75.4
12/31/2013	1,320,309	1,482,770	1,162,730	2,645,500	2,029,005	616,495	76.7
12/31/2014	1,340,344	1,510,717	1,223,128	2,733,845	2,123,910	609,935	77.7

- @ After change in asset valuation method.
- \* After change in benefits.
- # After changes in actuarial assumptions.

## BENEFIT DEDUCTIONS FROM NET POSITION BY TYPE

Last 10 Years

Calendar Years	SERVICE BENEFITS			DEATH BENEFITS		DISABILITY BENEFITS				Total		
	Normal Number	Amount	Early		Duty/Non-Duty		Duty		Non-Duty		Participants	Benefits
			Number	Amount	Number	Amount	Number	Amount	Number	Amount		
2006	4,156	\$ 87,010,607	3,513	\$ 34,096,345	112	\$ 910,194	27	\$ 318,947	221	\$ 1,066,747	8,029	\$ 123,402,840
2007	4,334	91,777,998	3,658	36,100,474	120	1,048,496	26	322,317	216	1,057,794	8,354	130,307,079
2008	4,476	94,522,827	3,760	37,401,953	124	1,059,054	25	319,262	210	1,043,164	8,595	134,346,260
2009	4,615	96,983,027	3,791	38,266,346	134	1,105,438	24	294,234	208	1,043,259	8,772	137,692,304
<b>Fiscal Years</b>												
2010	4,600	100,020,271	3,783	40,614,214	145	1,167,515	23	308,454	194	1,018,115	8,745	143,128,569
2011	4,717	104,792,727	3,990	41,654,507	160	1,276,445	22	300,684	189	1,021,679	9,078	146,046,042
2012	4,999	106,487,568	4,050	45,946,862	171	1,341,323	21	276,421	177	989,588	9,418	155,041,762
2013	5,124	110,634,206	4,232	46,926,222	169	1,308,058	21	265,153	173	964,489	9,719	160,098,128
2014	5,354	111,429,145	4,422	47,263,400	176	1,357,852	20	272,888	170	953,108	10,142	161,276,831
2015	5,557	112,009,606	4,590	47,509,606	181	1,401,710	20	272,296	165	952,482	10,513	162,145,700

**BENEFIT REFUNDS BY TYPE**

Last 10 Years

Fiscal Year	SEPARATION		DEATHS		TOTAL	
	No.	Amount	No.	Amount	No.	Amount
2006	818	\$ 2,865,448	20	\$ 222,052	838	\$ 3,087,500
2007	746	\$ 3,407,248	18	\$ 175,759	764	\$ 3,583,007
2008	857	\$ 4,064,627	24	\$ 165,223	881	\$ 4,229,850
2009	722	\$ 3,644,789	25	\$ 331,118	747	\$ 3,975,907
2010	648	\$ 3,201,604	15	\$ 138,306	663	\$ 3,339,910
2011	725	\$ 4,046,929	26	\$ 211,104	751	\$ 4,258,033
2012	659	\$ 3,934,877	26	\$ 360,294	685	\$ 4,295,171
2013	634	\$ 4,081,157	19	\$ 338,649	653	\$ 4,419,806
2014	727	\$ 5,164,862	40	\$ 608,097	767	\$ 5,772,959
2015	718	\$ 5,300,442	22	\$ 396,869	740	\$ 5,697,311

## RETIRED MEMBERS BY TYPE OF BENEFIT

(As of December 31, 2014)

Amount of Monthly Benefit	Number of Retired Members	TYPE OF RETIREMENT*					Basic Benefit	OPTION SELECTED**				
		1	2	3	4	5		1	2	3	4	5
\$ 1-\$ 250	1,823	457	1,301	29	31	5	1,376	102	5	47	50	263
251-500	1,773	741	902	18	107	5	1,334	119	9	63	33	215
501-750	885	396	454	8	24	3	635	47	8	27	21	147
751-1,000	853	510	325	7	11	0	573	23	22	41	10	184
1,001-1,250	1,003	696	294	4	9	0	726	35	12	39	7	184
1,251-1,500	723	548	170	2	3	0	528	20	8	38	6	123
1,501-1,750	638	529	108	0	1	0	437	24	11	39	6	121
1,751-2,000	619	533	83	2	0	1	398	19	10	38	4	150
Over 2,000	2,207	1,732	466	3	0	6	1,223	118	12	159	24	671
<b>Total</b>	<b>10,524</b>	<b>6,142</b>	<b>4,103</b>	<b>73</b>	<b>186</b>	<b>20</b>	<b>7,230</b>	<b>507</b>	<b>97</b>	<b>491</b>	<b>141</b>	<b>2,058</b>

**\* TYPE OF RETIREMENT:**      **\*\* OPTION SELECTED:**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1 Full Service</li> <li>2 Reduced Service</li> <li>3 Ordinary Death</li> <li>4 Ordinary Disability</li> <li>5 Service Connected Disability</li> </ul> | <ul style="list-style-type: none"> <li>Basic Benefit</li> <li>1 Beneficiary receives 100% of member's reduced monthly benefit</li> <li>2 Beneficiary receives 67% of member's reduced monthly benefit</li> <li>3 Beneficiary receives 50% of member's reduced monthly benefit</li> <li>4 Beneficiary receives a specified number of payments equal to 120 minus the number of payments the member has received.</li> <li>5 Member receives partial lump sum and reduced monthly benefit</li> </ul> |
|--|--|

*Note: The source of information presented above is from the most recent actuarial valuation report.*

## AVERAGE BENEFIT PAYMENTS BY YEARS OF SERVICE

	YEARS CREDITED SERVICE					
	5-10	10-15	15-20	20-25	25-30	30+
<b>Retirement Effective Dates</b>						
<b>Period 1/1/10 to 12/31/10</b>						
Avg Monthly Benefit	\$ 295.81	\$ 296.64	\$ 669.73	\$ 1,031.12	\$ 2,439.18	\$ 2,625.63
Avg Final Average Salary	\$ 4,964.70	\$ 4,995.25	\$ 5,724.04	\$ 6,377.40	\$ 7,307.50	\$ 7,871.13
No. of Retired Members	82	90	77	80	146	80
<b>Period 1/1/11 to 12/31/11</b>						
Avg Monthly Benefit	\$ 264.65	\$ 349.22	\$ 759.30	\$ 920.42	\$ 2,266.05	\$ 2,872.97
Avg Final Average Salary	\$ 4,842.94	\$ 4,912.25	\$ 5,806.50	\$ 6,084.78	\$ 7,278.50	\$ 8,073.08
No. of Retired Members	75	103	112	81	168	83
<b>Period 1/1/12 to 12/31/12</b>						
Avg Monthly Benefit	\$ 272.98	\$ 434.75	\$ 678.98	\$ 1,088.46	\$ 2,239.49	\$ 2,667.58
Avg Final Average Salary	\$ 4,962.62	\$ 5,182.69	\$ 5,965.10	\$ 6,278.19	\$ 7,040.31	\$ 8,026.53
No. of Retired Members	87	121	99	83	159	79
<b>Period 1/1/13 to 12/31/13</b>						
Avg Monthly Benefit	\$ 280.13	\$ 427.87	\$ 650.93	\$ 935.23	\$ 2,134.83	\$ 2,701.66
Avg Final Average Salary	\$ 5,190.10	\$ 5,292.03	\$ 6,089.14	\$ 6,206.50	\$ 6,784.33	\$ 7,862.51
No. of Retired Members	100	115	125	96	136	81
<b>Period 1/1/14 to 12/31/14</b>						
Avg Monthly Benefit	\$ 294.80	\$ 463.79	\$ 703.01	\$ 968.54	\$ 2,216.21	\$ 2,518.11
Avg Final Average Salary	\$ 4,965.46	\$ 5,477.16	\$ 5,963.68	\$ 6,310.28	\$ 7,418.79	\$ 7,816.52
No. of Retired Members	86	137	118	64	124	82



## AVERAGE COMPOSITE MONTHLY BENEFIT PAYMENTS FOR RETIREES

Last 10 Years

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**BY TYPE OF BENEFIT BEING PAID**

	Year	Service Retirement	Reduced Service	Ordinary Disability
Calendar Year	2005	\$ 1,707	\$ 800	\$ 459
	2006	1,745	809	466
	2007	1,765	822	475
	2008	1,760	829	469
	2009	1,751	841	480
	2010	1,727	849	495
	2011	1,717	853	492
	2012	1,688	839	570
	2013	1,626	815	575
	2014	1,557	799	583

## RETIREES AND BENEFICIARIES CURRENT ANNUAL BENEFITS TABULATED BY ATTAINED AGES

(As of December 31, 2014)

Attained Ages	TOTAL	
	No.	Annual Amount
Under 40	4	\$ 11,470
40-44	4	22,480
45	3	14,374
46	1	5,178
47	2	18,411
48	1	860
49	4	60,786
50	5	98,816
51	10	94,296
52	11	210,681
53	10	200,356
54	11	318,216
55	62	1,578,861
56	104	2,394,087
57	136	3,439,519
58	184	4,451,833
59	217	4,847,408
60	293	6,386,503
61	323	6,957,346
62	408	8,742,089
63	462	9,742,071
64	523	11,049,678
65	588	13,449,183
66	619	6,979,795
67	715	7,339,187
68	609	6,405,438
69	479	4,912,797
70-74	2,041	23,010,398
75-79	1,329	17,076,743
80 & Up	1,366	16,917,066
<b>Grand Total</b>	<b>10,524</b>	<b>\$156,735,926</b>

*Note: This source of information presented is from the most recent actuarial valuation report.*

## INACTIVE VESTED MEMBERS DEFERRED BENEFITS BY ATTAINED AGES

(As of December 31, 2014)

Attained Ages	TOTAL	
	No.	Annual Amount
27	2	\$ 5,999
28	22	74,913
29	39	134,021
30	67	237,533
31	101	386,698
32	103	400,504
33	153	608,171
34	148	596,964
35	171	666,079
36	151	538,824
37	159	506,948
38	154	488,102
39	139	413,253
40	148	343,170
41	139	351,847
42	136	347,314
43	160	464,074
44	148	367,767
45	132	345,126
46	122	374,138
47	123	371,542
48	111	319,163
49	101	259,090
50	97	258,410
51	99	313,722
52	98	317,149
53	96	309,533
54	100	335,460
55	75	296,494
56	62	224,789
57	67	285,960
58	71	264,532
59	58	199,429
60	36	189,697
61	38	195,680
62	34	112,660
63	27	123,198
64	25	91,027
65 & Over	38	95,324
<b>Grand Total</b>	<b>3,750</b>	<b>\$12,214,304</b>

*Note: This source of information presented is from the most recent actuarial valuation report.*

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# TWO SCHOOLS ONE FAMILY



ERFC would like to thank the staff and administrators of Kings Park and Kings Glen Elementary Schools for allowing us the opportunity to feature them in our 2015 Comprehensive Annual Financial Report. The children are who we all have in common and ERFC is here for those who serve to better their futures.

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*On our Front Cover and Introduction pages:  
Kings Glen Principal, Sam Elson  
Kings Park Principal, Dotty Lin  
Kings Glen Assistant Principal, Christine Ritter  
Kings Park Assistant Principal, Scott Hawk*



The Educational Employees'  
Supplementary  
Retirement System  
of Fairfax County

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