

### COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2013
The Educational Employees' Supplementary Retirement System of Fairfax County
A Component Unit of Fairfax County Public Schools
Fairfax, Virginia

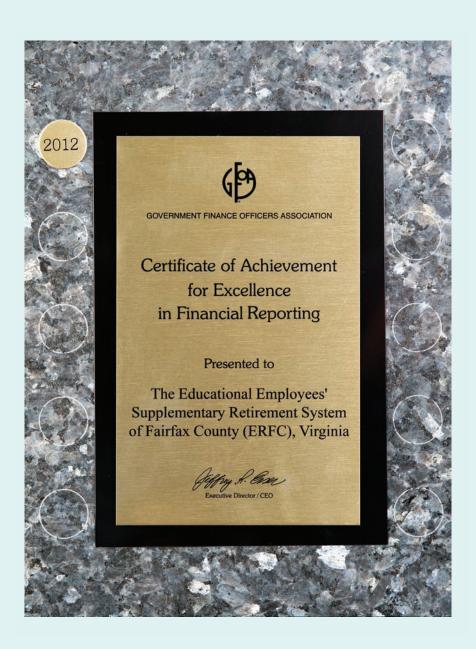
### Achievements

#### 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 2012 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.



# 2013 ERFC Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 2013 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/Trustee Leonard Bumbaca, Vice Chairperson/Trustee Susan Quinn, Treasurer/Trustee Nitin M. Chittal, Trustee Nancy Hammerer, Trustee De Hawley Brown, Trustee Richard Moniuszko, 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.

# **Table of Contents**

GFOA Certificate	Asset Structure41
of Achievement inside front cover	Investment Results
Public Pension Standards 2013 Award iv	Schedules of Ten Largest Equity & Fixed Income Holdings 45
INTRODUCTION SECTION	Schedule of Brokerage Commissions 46
Letter of Transmittal	Investment Summary
Letter from the Chairperson 6	Schedule of Investment
Board of Trustees 8	Management Fees
Administrative Organization9	
Professional Services10	ACTUARIAL SECTION
EINANCIAI SECTION	Actuary's Certification Letter 50
FINANCIAL SECTION  Independent Auditors' Report	Summary of Actuarial Assumptions and Methods52
Management Discussion and Analysis	Summary of Member Data57
(Unaudited)14	Short-Term Solvency Test
FINANCIAL STATEMENTS:	Analysis of Financial Experience 63
Statement of Fiduciary Net Position 17	Summary of Benefit Provisions
Statement of Changes in Fiduciary Net Position	Contribution Rates
Notes to the Financial Statements 19	Summary of Plan Changes
REQUIRED SUPPLEMENTARY INFORMATION:	STATISTICAL SECTION
Schedule of Employer Contributions 28	Net Assets70
Schedule of Funding Progress29	Changes in Net Assets 71
Notes to the Schedules of Required Supplementary Information 30	Assets and Liabilities Comparative Statement
OTHER SUPPLEMENTARY INFORMATION:	Benefit Deductions
Schedule of Administrative Expenses 32	from Net Assets by Type73
Schedule of Investment Expenses 33	Benefit Refunds by Type74
Schedule of Professional Service Fees 34	Retired Members by Type of Benefit 75
INVESTMENT SECTION	Average Benefit Payments by Years of Service76
Consultant Report on Investment Activity	Average Composite Monthly Benefit Payments for Retirees77
Strategic Review and Investment Policy	Retirees and Beneficiaries Current Annual Benefits Tabulated by Attained Ages78
Investment Managers 40	Inactive Vested Members Deferred Benefits by Attained Ages79

### **Achievements**

#### **PUBLIC PENSION STANDARDS 2013 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 2013

Presented to

### The Educational Employees' Supplementary Retirement System of Fairfax County

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)

> Alan H. Winkle Program Administrator



Franconia Elementary School Principal, Merrell Dade, believes that she and her staff are a community of learners who are dedicated to building tomorrow; whatever it may bring. Since 1932, Franconia Elementary has embraced generations of children and an active community rich in history as it has evolved from a four-classroom structure into a learning community where over 30 languages are spoken and over 75 educators devote each day to fostering the academic success and positive character development of every child.



November 25, 2013

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, 2013. 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 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 re-balance 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 ERFC supplemental

EDUCATIONAL EMPLOYEES' SUPPLEMENTARY RETIREMENT SYSTEM OF FAIRFAX COUNTY

retirement program with the introduction of a second retirement plan, ERFC 2001 – a streamlined and stand-alone retirement plan structure, provided for 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 twenty-thousand full-time educational, administrative and support employees of Fairfax County Public Schools (FCPS).

#### Administration and Technology Updates

The ERFC staff continued its promotion of the ERFCDirect online service during the year. Over six thousand active members and three thousand retirees now use this service to estimate future benefits, plan for retirement and monitor monthly benefit payments. The staff explored additional technology innovations that resulted in improved efficiencies or cost savings. Three of these initiatives are slated for completion in the current fiscal year: posting of member benefit statements on-line, improved general ledger reporting and redesign of the manual benefit estimation verification and audit process to an automated process.

Earlier this year, the ERFC staff welcomed Jasper Baldwin to its administrative leadership team, as the System's new Retirement Specialist. Prior to her appointment, Baldwin spent seven years as a senior benefits specialist with a government contracting firm and one year as an educator with the Monroe County, Florida School District. ERFC's prior Retirement Specialist, Allison Kelly, was promoted to Investment Accounting Analyst. Stephanie Thomas joined ERFC as its Information Systems Management Analyst. Prior to her promotion, Thomas served as an FCPS School Based Technology Specialist since 1999 and was Director of the Automated Information Systems Division at the US Department of Agriculture for ten years.

#### Strategic Plan

The Board of Trustees adopted its 2013 Strategic Plan in July, completing its initiatives outlined in the 2011 Strategic Plan. The 2013 Strategic Plan emphasizes enhancement of ERFC's communication and education program through expanded presence in schools, development of targeted communications to members at different phases in their careers, improved website content and a liaison role with the Virginia Retirement System on communication of its hybrid plan. The Board included creation of a Board Education policy under its governance initiatives and review of its Funding policy in light of the new GASB standards. Under ERFC Services and Internal Management initiatives, staff was directed to finalize the transition of the retiree newsletter and member statements to paperless, implement the new GASB 67 and 68 standards and conduct an operational audit.

#### Plan Financial Condition

The ERFC achieved an 11.2 percent return for fiscal year 2013, a rebound from the low .4 percent return earned during fiscal year 2012. For the year, ERFC exceeded its policy index by two percent due to the strong equity returns. ERFC has achieved a

double-digit return in three out of the last four fiscal years.

ERFC's independent actuary reported that the System's funding ratio declined slightly from 75.6 percent to 75.4 percent for the valuation period ending December 31, 2012 due to continued phase-in of the 2011 market experience. As a result, the employer contribution rate increased from 5.34 percent to 5.60 percent of payroll for fiscal year 2014.

The Financial, Actuarial, and Statistical sections of this report provide detailed information regarding the Fund's overall financial condition. In addition, the Schedule of Funding Progress, included in the Financial Section, presents historical data for the ERFC's funding ratio.

#### **Investment Activity**

The ERFC's 11.2 percent return for FY 2013 significantly outperformed its benchmark index but slightly underperformed its peer systems for the fiscal year with the median fund returning 11.7 percent. This peer system underperformance is not unexpected as the Fund's 23.8 percent U.S. equity allocation was lower than the median fund's 36.3 percent allocation and domestic equity was the best performing sector during the fiscal year. As explained in previous reports, the Board reduced the domestic equity risk in the portfolio in recent years. The Fund's longer-term return, however, remained strong, with the ten year return ranked in the fifteenth percentile.

The Board continued implementation of its private equity program during the fiscal year. It committed \$10 million to the Private Advisors Buyout Fund V. The Board anticipates that ERFC will meet its long-term investment objectives by taking these prudent measures to add further diversification in the portfolio with less reliance on the domestic equity markets. The Investment Section of this report provides further details regarding the Fund's activities and performance.

#### **Professional Services**

The ERFC Board of Trustees appoints professional services to provide 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.

#### **Awards**

The System proudly announces that the Government Finance Officers Association of the United States and Canada (GFOA) recently awarded ERFC the **Certificate of Achievement for Excellence in Financial Reporting** for its FY 2012 Comprehensive Annual Financial Report (CAFR). This is the 16th consecutive year ERFC has earned the award. The GFOA certification remains valid for a period of one year, and requires,

EDUCATIONAL EMPLOYEES' SUPPLEMENTARY RETIREMENT SYSTEM OF FAIRFAX COUNTY

at minimum, that each CAFR satisfy both generally accepted accounting principles and legal requirements. For the first time, the FY 2012 CAFR received the Award of Excellence from the National School Public Relations Association (NSPRA).

The Public Pension Coordinating Council also honored the ERFC recently, granting the System the **Public Pension Standards' 2013 Award**. The ERFC earned the award in recognition for meeting or exceeding professional standards for plan design and administration, as set forth in the Public Pension Standards. The ERFC Retirement Counseling Team received honorable mention for the Collaborative Team Excellence Award, sponsored by the FCPS Department of Human Resources.

#### 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



November 25, 2013

Dear ERFC Members.

On behalf of the Board of Trustees of the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC), it is a privilege to present the Comprehensive Annual Financial Report for the fiscal year ending June 30, 2013. The ERFC Board and staff is committed to maintaining the financial integrity of the fund, and adhering to best practices in all areas of customer service. As we celebrate the 40th anniversary of ERFC's inception, the participants and stakeholders in ERFC can be proud of the legacy created to emphasize retirement security and to protect the System's assets in order to provide the supplemental retirement benefits promised to you by Fairfax County Public Schools.

The fiscal year introduced one change to the composition of ERFC's Board. Nitin Chital left the Board after serving ERFC as the individual Trustee for nine years. The Board thanks Mr. Chittal for his dedicated service to ERFC. Upon Mr. Chittal's departure, the School Board appointed Michael Burke as the individual Trustee. Mr. Burke is Managing Director and Mid-Atlantic Regional Manager for the Wealth and Investment Management division of Barclays. He brings more than 25 years of investment experience to the Board. I was re-elected to a fourth three-year term by the membership in spring 2013 and was re-elected as Chairperson in July, 2013.

The ERFC Board continues to emphasize that ERFC members and retirees should receive the fullest possible range of support services and again made communication activities a high priority in the 2013 Strategic Plan which it adopted earlier this year. To increase the understanding and appreciation of the value of ERFC and the total retirement program among our members, the Board included action plans to increase ERFC's presence at schools, create targeted communications for members at different phases of their careers and enhance ERFC website content. The personal counseling sessions offered by the ERFC staff, the ERFCDirect online service, and the retirement workshops remain as critical components of the communications program. The Board of Trustees gratefully acknowledges the teamwork and commitment provided by the entire ERFC staff during the prior fiscal year.

This annual report details the ERFC system and investment activities specific to the 2013 fiscal year period ending June 30th. The Board is pleased with the 11.2 percent return for the 2013 fiscal year period and the double-digit returns in the last three out of four fiscal years which helped mitigate the results of the 2008-09 downturn. The Board continues to work closely with the ERFC staff and investment advisors to achieve a well-diversified asset mix, driven by risk-balanced strategies, and managed

# Letter from the Chairperson

with the disciplined oversight required to meet the System's long-term investment goals.

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. In April, 2012 the Virginia Governor signed into law significant changes to the VRS including reduced pension benefits for employees with less than five years of service and a new hybrid plan for new employees hired on or after January 1, 2014. The ERFC staff intends to act as a liaison with VRS in assisting existing members with the opt-in decision into the hybrid plan early in 2014.

The School Board increased FCPS' employer contribution rate from 5.34 percent of covered payroll to 5.60 percent for the 2014 fiscal year. The combined employee and employer contributions comprise the initial platform 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 continued market volatility, the Board believes ERFC will continue to thrive 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 ERFC Board and staff value your opinions and welcome your feedback. We encourage you to visit the website at: www.fcps.edu/erfc/ or contact us directly with any questions regarding your pension fund or payable 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



Nitin M. Chittal Individual Trustee Appointed Member



Nancy Hammerer Trustee Elected Member

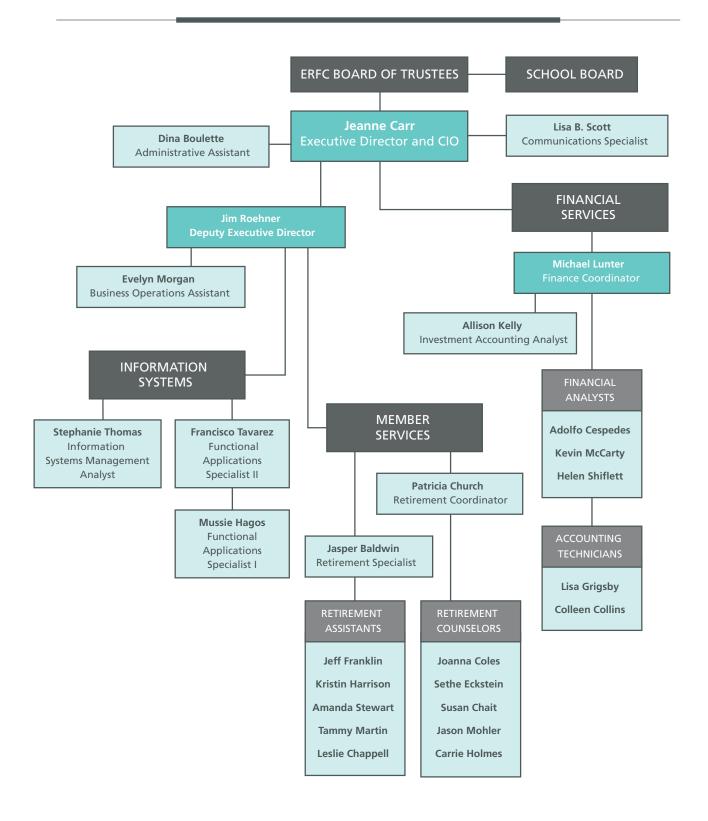


Richard Moniuszko Trustee Appointed Member



**De Hawley Brown** 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

Turner Investment Partners, Inc.

Berwyn, Pennsylvania

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 Managment 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

AllianceBernstein

New York, New York

Causeway Capital Management, LLC <sup>1</sup>

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>&</sup>lt;sup>1</sup> Hired in fiscal year 2013

<sup>\*</sup> See page 47 in the Investment Section



Fairfax County Public Schools (FCPS), established in 1870, originally used an accounting system of journals and ledgers as the principal books for recording and totaling monetary transactions such as: employee compensation, school purchases, facility maintenance, and public utilities. A sampling of the original books, (shown above), includes handwritten entries from FCPS schools, and each section of this CAFR edition features ledger entries as they appear in alphabetical order within the historical documents.

# Independent Auditors' Report



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

#### **Independent Auditors' Report**

The Board of Supervisors County of Fairfax, Virginia

The School Board Fairfax County Public Schools

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

#### Report on the Financial Statements

We have audited the accompanying financial statements of the Educational Employees' Supplementary Retirement System of Fairfax County (the System), a pension trust fund of the County of Fairfax, Virginia, as of and for the year ended June 30, 2013, and the related notes to the financial statements, which collectively comprise the System's financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

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

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 opinions.

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



#### **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial net position of the System as of June 30, 2013, and the changes in net position for the year then ended in accordance with U.S. generally accepted accounting principles.

#### Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that management's discussion and analysis on pages 14-16, the schedule of employer contributions and the schedule of funding progress on pages 28-29, and the notes to the schedules of required supplementary information on pages 30-31 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 pages 32-34, the investment section on pages 36-48, the actuarial section on pages 50-68 and the statistical section on pages 70-79 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

The introductory section, and the investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.



November 25, 2013

## Management Discussion and Analysis

(Unaudited)

his 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, 2013. 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 2013 the return on ERFC's assets was 11.2 percent¹. This resulted in a total net asset value of \$1.96 billion which reflects an increase of \$129.0 million over fiscal year 2012's year end total (as reflected in the accompanying chart). Additional detail on this net increase 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 \$190.9 million in investment income and \$106.2 million in employee and employer contributions. The additions are offset by \$160.1 million in retiree benefit payments and \$8.0 million in member refunds and administrative expenses.

Fiscal year ending June 30, 2013 produced a return of 11.2 percent. ERFC's return exceeded the policy benchmark return of 9.2 percent<sup>2</sup>. Three, five, and ten year returns are 10.9 percent, 5.2 percent, and 7.8 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

Fiscal	Ending	Net Cl	hange
Year	Balance	Dollars	Percent
2009	\$ 1,441.5	(417.1)	(22.4)
2010	1,607.7	166.2	11.5
2011	1,887.0	279.3	17.4
2012	1,827.8	(59.2)	(3.1)
2013	1,956.8	129.0	7.1

can be found in the Investment Section of this report.

At December 31, 2012, the actuarial value of assets totaled \$1.935 billion while liabilities totaled \$2.566 billion. This resulted in a funding ratio of 75.4 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. The Schedule of Funding Progress contained in this section provides additional historical information.

- 1 As calculated by New England Pension Consultants
- 2 Policy Index benchmark is 16% 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, 1.5% Cambridge PE,3% JPM GBI EM.
- 3 New England Pension Consultants Universe (Public Funds in excess of \$1 billion)

# 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 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 received positive revenues from contributions. 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 ERFC schedule of employer contributions and funding progress which is intended to assess ERFC's ability to accumulate assets to pay retirement benefits when due.

#### **SUMMARY OF FIDUCIARY NET POSITION**

	June 30,2013	June 30,2012	Difference
Assets			
Total cash and investments	\$ 2,022,309,156	\$ 1,857,824,191	\$ 164,484,965
Total receivables	11,291,746	61,207,572	(49,915,826)
Other assets	28,645	42,421	(13,776)
Total assets	2,033,629,547	1,919,074,184	114,555,363
Liabilities			
Accounts payable	1,864,168	2,775,296	(911,128)
Securities purchased	8,493,585	64,495,593	(56,002,008)
Securities lending collateral	66,498,968	24,034,973	42,463,995
Total liabilities	76,856,721	91,305,862	(14,449,141)
Total net position restricted for pensions	\$ 1,956,772,826	\$ 1,827,768,322	\$ 129,004,504

## Management Discussion and Analysis

(Unaudited)

#### **Financial Statements**

As indicated in the Summary of Fiduciary Net Position, the System's net asset value increased \$129.0 million or 7.1 percent in fiscal year 2013. This total increase in net position is due primarily to an increase of \$164.5 million in the value of investments, a decrease in receivables of \$(49.9) million, a \$(56.9) million decrease in the value of payables along with an increase of \$42.5 million in securities lending collateral liabilities.

As reflected in the Summary of Additions and Deductions (below), the net change is due to \$106.1 million in contributions and \$190.9 million in net investment income, which is offset by \$160.1 million in benefits, \$4.4 million in refunds and \$3.6 million in expenses.

Also presented in the Summary of Additions and Deductions, additional information is provided regarding the differences between the fiscal year 2012 and 2013 results. These differing results are due mainly to a significant increase in investment income of \$189.3 million and an increase in contributions of \$4.1 million, offset by an increase in benefit payments of 5.1 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 30,2013	June 30,2012	Difference
Additions			
Contributions			
Employer	\$ 67,734,634	\$ 52,934,245	\$ 14,800,389
Member	38,428,367	49,142,379	(10,714,012)
Net investment income	190,947,851	1,635,435	189,312,416
Total	297,110,852	103,712,059	193,398,793
Deductions			
Benefits	160,098,128	155,041,762	5,056,366
Refunds	4,419,806	4,295,171	124,635
Admin. Expenses	3,588,414	3,574,923	13,491
Total	168,106,348	162,911,856	5,194,492
Net Change	\$ 129,004,504	\$ (59,199,797)	\$ 188,204,301

# Statement of Fiduciary Net Position

(As of June 30, 2013)

#### **ASSETS**

Cash and short-term investments	
Cash	\$ 935,395
Cash with fiscal agent	1,096,270
Cash collateral for securities on loan	66,498,968
Short-term investments	30,897,541
Total cash and short-term investments	99,428,174
Receivables	
Interest and dividends	3,512,946
Securities sold	7,723,428
Miscellaneous accounts receivable	55,372
Total receivables	11,291,746
Investments, at fair value	
US Government obligations	22,836,510
Mortgage-backed securities	3,973,060
Domestic corporate bonds	84,011,424
Convertible bonds	12,143,244
International bonds	38,735,376
Common stock	602,647,233
Real estate	158,717,664
Preferred stock	2,409,937
Global asset allocation	186,066,940
Better beta	90,595,119
Hedge fund of funds	156,881,646
Private Equity Limited Partnership	25,221,027
Mutual funds	538,641,802
Total investments	1,922,880,982
Prepaid assets	
Prepaid expenses	15,000
Other assets	
Furniture and equipment, net	13,645
Total assets	2,033,629,547
Deferred outflows of resources	
LIABILITIES	
Accounts payable	1,864,168
Securities purchased	8,493,585
Securities lending collateral	66,498,968
Total liabilities	76,856,721
Deferred inflows of resources	-
Net position restricted for pensions	\$ 1,956,772,826
See accompanying Notes to the Financial Statements	

See accompanying Notes to the Financial Statements

# Statement of Changes in Fiduciary Net Position

(For the Fiscal Year Ending June 30, 2013)

#### **ADDITIONS**

Contributions	
Employer	\$ 67,734,634
Plan members	38,428,367
Total contributions	106,163,001
Investment income	
Net appreciation in fair value of investments	151,780,654
Interest and dividends	46,447,961
Real estate income	3,416,148
Other	42,998
Total investment income	201,687,761
Less investment expenses	
Investment management fees	10,277,505
Investment consulting fees	405,838
Investment custodial fees	190,485
Investment salaries	232,927
Total investment expenses	11,106,755
Income from securities lending activities	
Securities lending income	138,169
Securities lending borrower rebates	386,514
Securities lending management fees	(157,838)
Net securities lending income	366,845
Net investment income	190,947,851
Total additions	297,110,852
DEDUCTIONS	
Benefits	160,098,128
Refunds	4,419,806
Administrative expense	3,588,414
Total deductions	168,106,348
Net increase in net position	129,004,504
Net position restricted for pensions	
Beginning of year	1,827,768,322
End of year	\$ 1,956,772,826
See accompanying Notes to the Financial Statements	

he 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.

# 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.

#### **Investment Policy and 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 are provided to ERFC's master custodian by the managers. These commingled funds include private real estate, global asset allocation, better beta, hedge fund of funds, emerging market equity and emerging market debt. 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—depending on the actual contents of these separate portfolios—the assets are either reported at fair value as determined by the markets for those assets, or, if market quotes are not readily available, they are determined by the manager, subject to annual audits.

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.

#### 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.

*Notes,* continued on next page

June 30, 2013, the cash balance of \$935,395 represents funds that could not be invested in the County's enhanced cash fund until July 1, 2013.

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, 2013, cash with fiscal agent totaled \$1,096,270. This cash is insured and represents receipts from investment sales occurring on the last day of the month.

In fiscal year 2013, the System implemented GASB Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position, issued in June, 2011 and GASB Statement No. 65, Items Previously Reported as Assets and Liabilities, issued March, 2012.

# 2. Plan Distribution and Contribution Information

#### **Benefit Structure Descriptions**

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.

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

At December 31, 2012, the date of the most recent actuarial valuation, the System's membership consisted of:

Retirees and beneficiaries currently receiving benefits 9,788

Terminated employees entitled to benefits but not yet receiving them 3,099

Active plan members 21,519

Total 34,406

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 receive a 1.49 percent increase. Participants who retire on or after January 1 receive no cost-ofliving increase that first March. Additional detail regarding all benefit payment types can be found in the actuarial valuation and/or the System 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 800-426-3900. It is also available online at www.fcps.edu/erfc/publications.shtml.

#### Contributions

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.

Notes, continued on next page

#### **Funding Policy**

The contribution requirements of members and the employer are established and may be amended by the ERFC Board of Trustees, subject to School Board approval. Members are required to contribute 3 percent of annual salary. The employer is required to contribute at an actuarially determined rate which presently is 5.34 percent. The actuarial valuations as of odd numbered years are used to set the employer contribution rate for the two-year 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 in order to avoid a Net Pension Obligation (NPO). 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. This necessitated a corresponding 1 percent increase to the employer contribution rate to 5.34 percent from July 1, 2012 to June 30, 2013.

#### **Annual Pension Cost**

ERFC's annual required contribution (ARC) for fiscal year 2013 was \$68 million, of which 100% was contributed, resulting in no net pension obligation in the current fiscal year.

#### **Funded Status and Funding Progress**

As of December 31, 2012, the most recent actuarial valuation date, ERFC was 75.4 percent funded. The actuarial accrued liability for benefits was \$2.57 billion and the actuarial value of assets was \$1.94 billion, resulting in an unfunded actuarial accrued liability (UAAL) of \$0.63 billion. The covered payroll (annual payroll of active employees covered by the plan) was \$1.3 billion, and the ratio of the UAAL to the covered payroll was 48.6 percent.

The Schedule of Funding Progress, presented as RSI following the Notes to the Financial Statements, presents multi-year trend information about whether the actuarial value of Plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits.

# Actuarial Methods and Assumptions In the December 31, 2012 actuarial valuation,

the entry age actuarial cost method was used in preparing the valuation. The actuarial assumptions include a 7.5 percent investment rate of return and 3.75 to 9.05 percent annual wage increase of which both include a 3.75 percent inflation assumption. In addition, there is a 3 percent retiree cost-ofliving adjustment. Unfunded actuarial liabilities are amortized over a closed 30 year period using the level percent of payroll method. The remaining amortization period at December 31, 2012 was 26 years. Assets are valued using the 5 year smoothing formula, which recognizes that assets must always be between 75 percent and 125 percent of the market. If the method results in an actuarial value of assets that is less than 75 percent or more than 125 percent, the actuarial value will be reset and the difference between market and actuarial value shall be spread over 4 future years. There is no legal maximum requirement on the employer contribution rate.

#### 3. Investment Securities

#### 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 Board of Trustees makes all investment decisions which are based on information and/or recommendations provided by ERFC's investment consultant and ERFC staff.

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 assets held in trust for pension benefits.

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,

*Notes,* continued on next page

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, 2013, the fair value of the CMOs was \$548,518, 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 Emerging Markets Debt Fund, the Emerging Markets Growth Fund, one Private Equity manager, two of the Real Estate managers, and two 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 which reduce the effect of interest rate fluctuations by converting floating rate financing into fixed rate loans for 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 F/X rate and the forward F/X rate, and through investing the 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. At June 30, 2013, exposure to interest rate swaps was \$2,231,740, exposure to futures contracts was \$(1,252,671), exposure to NDF's was \$(1,510,081), exposure to forward commodity contracts was

Notes, continued on page 24

Investment Combined Duration as of June 30, 2013				
Investment Category	Amount	Modified Duration		
U.S. Treasuries	\$101,163,027	4.08		
Agencies	12,808,451	1.67		
Corporate Bonds	146,515,176	6.01		
Municipals	8,934,563	4.65		
Mortgages	109,120,931	2.60		
Asset-Backed Securities	2,991,078	6.74		
CMBS	2,589,013	3.18		
Emerging Market	51,102,964	4.68		
Foreign bonds	48,531,974	2.11		
Convertible and preferred	12,971,731	7.50		
Cash and cash equivalents	13,245,154	0.20		
Other	25,618,198	0.84		
Total	\$ 535,592,260			

<sup>\*</sup> Weighted Duration in years: 3.98

Rating	Category	Percent	Amount	Total	Percent
AAA	Domestic bonds	0.0%	\$ 188,967		
AAA	International bonds	2.2%	11,610,319		
AAA	Mortgage backed securities	0.3%	1,530,410		
AAA	US Government obligations	0.0%	9,727	13,339,423	2.5%
AA	Domestic bonds	0.5%	2,914,894		
AA	International bonds	0.3%	1,808,073		
AA	Mortgage backed securities	6.4%	34,031,647		
AA	US Government obligations	9.1%	48,839,445	87,594,059	16.4%
A	Domestic bonds	2.6%	13,760,862		
A	International bonds	6.6%	35,297,062		
A	Mortgage backed securities	0.1%	308,489		
A	US Government obligations	0.0%	25,384		
A	Convertible bonds	0.0%	203,901	49,595,698	9.3%
ВВВ	Domestic bonds	8.9%	47,490,658		
BBB	International bonds	3.5%	18,942,697		
BBB	Mortgage backed securities	0.1%	312,564		
BBB	US Government obligations	0.0%	~		
BBB	Convertible bonds	0.6%	3,229,625		
BBB	Preferred stocks	0.0%	121,000	70,096,544	13.1%
ВВ	Domestic bonds	3.6%	19,447,192		
BB	International bonds	2.0%	10,592,283		
BB	Mortgage backed securities	0.0%	~		
BB	US Government obligations	0.0%	~		
BB	Convertible bonds	0.8%	4,064,268		
ВВ	Preferred stocks	0.0%	121,688	34,225,431	6.4%
В	Domestic bonds	1.7%	9,047,862		
В	International bonds	0.0%	~		
В	Mortgage backed securities	0.0%	33,812	9,081,674	1.7%
Below B	Domestic bonds	0.6%	2,987,834		
Below B	International bonds	0.0%		2,987,834	0.6%
Not rated	Cash and Cash equivalent	3.5%	18,809,294		
Not rated	Convertible Bonds	0.9%	4,645,452		
Not rated	Mortgage backed securities	0.1%	479,063		
Not rated	International bonds	3.3%	17,704,282		
Not rated	Domestic bonds	37.3%	199,842,926		
Not rated	US Government obligations	4.3%	22,836,512		
Not rated	Preferred stocks	0.0%	188,193	264,505,722	49.4%
Withdrawn rating	Domestic bonds	0.7%	3,806,488		
Vithdrawn rating	International bonds	0.1%	347,990		
Withdrawn rating	Mortgage backed securities	0.0%	11,397	4,165,875	0.8%
Total		100.0%	\$ 535,592,260	\$ 535,592,260	100.0%

\$(580,749), and exposure to currency forward contracts was \$(27,552,326).

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 four fixed income managers use the modified duration method to control interest rate risk. 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. The fourth fixed income manager uses the effective duration method to control interest rate risk. This manager's duration 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, 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, 2013, the System had three active fixed income managers and one passive fixed income manager. The schedule on the prior page lists the ratings of all of ERFC's fixed income investments according to Moody's Investment Services and Standard & Poor's.

#### Concentration of Credit Risk

The System's policy limits the securities of any one issue 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, 2013, and as addressed previously, the System had three domestic active fixed income managers and one passive fixed income manager. The active manager portfolios had values of \$159.4 million, \$53.5 million and \$207.9 million. The indexed portfolio had a value of \$114.8 million. The market value of the largest issue other than the U.S. Government in the portfolios of the active managers was only 9.2 percent of that portfolio. Since the passive manager's portfolio is an index mutual fund, it is excluded from the Concentration of Credit Risk measurement.

#### **Deposits**

At June 30, 2013, short-term investments with the custodial bank totaled \$30,897,541. These investments are collateralized with securities held

Notes, continued on next page

Summary of Security Lending June 30, 2013:

Securities	Cash Market Value	Cash Collateral
Domestic corporate bonds	\$ 6,593,923	\$ 6,753,205
International stock	3,986,141	4,193,530
Domestic stock	52,324,482	53,587,572
Government	1,925,021	1,964,661
Total	\$ 64,829,567	\$ 66,498,968

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 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 market value for domestic securities and 105 percent for international securities. The System did not impose any restrictions during the period on the amount 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 market 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 \$ 66,498,968 as of June 30, 2013, are shown on the Statement of Plan Net Assets. As of June 30, 2013, the market value of securities on loan for cash collateral was \$ \$64,829,567. 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.

 $\it Notes$ , continued on page 27

Investments with the custodian as of June 30, 2013, included the following:

vestment Type	Market Value
US Government obligations	22,836,510
Mortgage-backed securities	\$ 3,973,060
Domestic corporate bonds	84,011,424
Convertible bonds	12,143,244
International bonds	38,735,376
Common stock	602,647,233
Real Estate	158,717,664
Preferred stock	2,409,937
Global asset allocation	186,066,940
Better beta	90,595,119
Hedge fund of funds	156,881,646
Private Equity Limited Partnership	25,221,027
Mutual funds	538,641,802
Sub-total investments	\$ 1,922,880,982
Cash collateral for securities on loan	66,498,968
Total	\$ 1,989,379,950

Mai	rket Value of For	eign Currency Ris	sk (As of June 30	, 2013)	
Currency	Cash & Cash Equivalents	Equity	Fixed Income Securities	Preferred Securities	Grand Total
AUSTRALIAN DOLLAR	\$ 78,418	\$ 4,533,115	\$ 3,733,573		\$ 8,345,106
BRAZIL REAL	29,075	1,319,733	12,232,194	1,365,867	14,946,869
CANADIAN DOLLAR	59,005	11,201,414	6,313,729		17,574,148
CHILEAN PESO	1,481,005		671,291		2,152,296
COLUMBIAN PESO	96,963		4,179,923		4,276,886
CZECH KORUNA	2,521				2,521
DANISH KRONE		1,035,166			1,035,166
EURO CURRENCY UNIT	558,184	67,179,721	1,288,276	613,189	69,639,370
HONG KONG DOLLAR	420,952	14,761,042			15,181,994
HUNGARIAN FORINT	83		2,194,601		2,194,684
INDONESIAN RUPIAH	9,594	257,649			267,243
ISRAELI SHEKEL	10,114				10,114
JAPANESE YEN	175,706	46,420,387			46,596,093
MALAYSIAN RINGGIT	105,720	1,418,822	4,315,452		5,839,994
MEXICAN NEW PESO	5,593	1,297,169	7,941,978		9,244,740
NEW TAIWAN DOLLAR	~	4,618,994			4,618,994
NEW TURKISH LIRA	10,608	2,204,287	2,566,572		4,781,467
NEW ZEALAND DOLLAR	34,735	165,321	7,286,014		7,486,070
NORWEGIAN KRONE	13,161	4,946,245	2,723,572		7,682,978
PERUVIAN NUEVO SOL	~		2,689,845		2,689,845
PHILIPPINES PESO	85,333	40,561			125,894
POLISH ZLOTY	98,279	418,355	6,324,943		6,841,577
POUND STERLING	242,872	48,861,069	279,568		49,383,509
RUSSIAN ROUBLE			3,238,945		3,238,945
S AFRICAN COMM RAND	94	1,297,673	4,933,380		6,231,147
SINGAPORE DOLLAR	46,483	6,444,095	4,362,008		10,852,586
SOUTH KOREAN WON	5,645	9,214,948	2,217,393		11,437,986
SWEDISH KRONA	99	5,400,984			5,401,083
SWISS FRANC	206,825	17,337,545			17,544,370
THAILAND BAHT	574,641	1,743,581			2,318,222
Grand Total	\$ 4,351,708	\$ 252,117,876	\$ 79,493,257	\$ 1,979,056	\$ 337,941,897

#### 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

The System's Investment Guidelines on active fixed income holdings are limited to debt instruments of U.S. entities denominated in U.S. dollars which includes U.S. denominated sovereign bonds. However, with Trustee approval, ERFC's two active fixed income managers have been granted exceptions that allow investments in non-U.S. bonds—one at a maximum of 25% and the other at 20%.

At the present time, there are no specific foreign currency guidelines for equities, however, the equity managers are all measured against specific benchmarks and are expected to adhere to the 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 information is presented herein for the most recent six fiscal years as required supplementary information (RSI). 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.

#### Schedule of Employer Contributions

Year ended June 30	Annual Required Contribution	Percentage Contributed
2008	38,334,140	100%
2009	37,281,658	107%
2010	35,146,816	108%
2011	47,118,111	100%
2012	50,738,815	104%
2013	67,734,634	100%

Analysis of the dollar amounts of plan net assets, actuarial accrued liability, and unfunded actuarial accrued liability in isolation can be misleading. Expressing plan net assets as a percentage of the actuarial accrued 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 unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of annual covered 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.

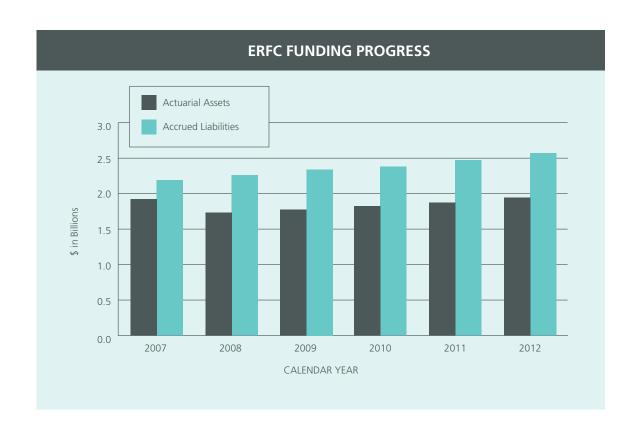
The following Schedule of Funding Progress, presented as RSI, shows multiyear trend information which illustrates whether the actuarial value of plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits. As addressed previously and as noted on the Schedule of Funding Progress, ERFC has transitioned to calendar year valuations. The most recent valuation was effective December 31, 2012. This transition to calendar year valuation was done in order to provide a more current contribution rate which could be included in the school system's Superintendent's proposed budget and to provide more accurate information to the actuary for the annual valuation.

# Required Supplementary Information

(Unaudited)

#### **SCHEDULE OF FUNDING PROGRESS** (\$ in thousands)

	Actuarial	Actuarial Accrued	[Excess of Assets]	[Excess of Assets UAAL as a		
Actuarial Valuation Date	Value of Assets (a)	Liability (AAL) -Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	Percentage of Covered Payroll ((b-a)/c)
12/31/07	\$ 1,924,886	\$ 2,186,801	\$ 261,915	88.02%	\$ 1,161,432	22.55%
12/31/08	\$ 1,733,946	\$ 2,255,298	\$ 521,352	76.88%	\$ 1,211,140	43.05%
12/31/09	\$ 1,769,540	\$ 2,339,869	\$ 570,329	75.62%	\$ 1,208,093	47.21%
12/31/10	\$ 1,822,603	\$ 2,384,061	\$ 561,458	76.45%	\$ 1,191,290	47.13%
12/31/11	\$ 1,866,952	\$ 2,470,964	\$ 604,012	75.56%	\$ 1,246,973	48.44%
12/31/12	\$ 1,935,292	\$ 2,566,128	\$ 630,836	75.42%	\$ 1,297,537	48.62%



# Notes to the Schedules of Required Supplementary Information

(Unaudited)

#### SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation is as follows:

Valuation date December 31, 2012

Actuarial cost method Entry age

Amortization method Level percent of payroll

Remaining amortization period 26 years

Asset valuation method 5-year smoothed market which recognizes asset

values should be between 75% and 125% of the

market value

Actuarial assumptions:

Investment rate of return 7.5%\*

Projected active member salary increases 3.75–9.05%\*

Retiree cost-of-living adjustments 39

\* Includes inflation at 3.75%

#### Reserves

There are no legally required actuarial or investment reserves for the pension system nor are there any incorporated. However, there is a budgetary reserve of \$3 million. This is a budget line item that is subject to the annual review and recommendation of the Board of Trustees and approval by the School Board.

# Notes to the Schedules of Required 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 six fiscal years.

- July 1, 2012 The employee contribution rate decreased from 4 percent to 3 percent and the employer contribution rate increased from 4.34 percent to 5.34 percent.
- July 1, 2011 The employer contribution rate increased from 4.04 to 4.34 percent.
- July 1, 2010 The employer contribution rate is increased from 3.2 percent to 4.04 percent.
- July 1, 2009 The employer contribution rate is decreased from 3.37 percent to 3.2 percent.
- 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.

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

		Total
2.53	4.00	6.53
3.37	4.00	7.37
3.37	4.00	7.37
3.37	4.00	7.37
3.37	4.00	7.37
3.37	4.00	7.37
3.20	4.00	7.20
4.04	4.00	8.04
4.34	4.00	8.34
5.34	3.00	8.34
	2.53 3.37 3.37 3.37 3.37 3.37 3.20 4.04 4.34	2.53 4.00 3.37 4.00 3.37 4.00 3.37 4.00 3.37 4.00 3.37 4.00 3.20 4.00 4.04 4.00 4.34 4.00

- 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

## **SCHEDULE OF ADMINISTRATIVE EXPENSES**

Total administrative expenses	\$ 3,588,414
Total other services and charges	543,256
Miscellaneous	12,437
Depreciation expense and asset disposal	3,984
Building rent	248,931
Equipment	232,279
Board travel and staff development	45,625
Other services and charges	
Total supplies	19,330
Dues and subscriptions	8,635
Office supplies	10,695
Supplies	
Total communications	66,385
Postage	36,098
Printing	30,287
Communications	
Total professional services	323,060
Audit	47,940
Strategic planning	17,121
Plan automation support	16,200
Payroll disbursement	42,088
Legal	61,731
Actuarial	137,980
Professional services	
Total personnel services	2,636,383
Social security	148,026
Insurance	277,182
Retirement contributions	393,167
Salaries and wages	\$ 1,818,008

# Other Supplementary Information

## **SCHEDULE OF INVESTMENT EXPENSES**

Investment management fees	
Fixed income managers Loomis-Sayles and Company, L.P. Mellon Capital Management Corporation Mondrian Investment Partners (US), Inc. Pacific Investment Management Company	\$ 494,085 21,930 400,062 495,706
Equity managers Aronson Johnson Ortiz, LLC Epoch Investment Partners, Inc. Lazard Asset Management Mellon Capital Management Corporation Westfield Capital Management	157,596 424,366 309,756 23,453 320,650
International managers Acadian Asset Management, Inc. AllianceBernstein L.P. Causeway Capital Management, LLC William Blair & Company	583,835 327,785 218,265 833,273
Real Estate managers J.P. Morgan Asset Management Prudential Financial UBS Realty Investors, LLC CenterSquare Investment Management (formerly Urdang)	313,906 186,812 293,292 501,714
Global Asset Allocation managers Pacific Investment Management Company Wellington Management Company LLP	822,345 1,011,342
Better Beta Bridgewater Associates	491,033
Hedge fund of funds Grosvenor Capital Management, L.P. Permal Investment Management Services. Ltd.	734,118 696,511
Private equity Audax Mezzanine Fund III, L.P. HarbourVest Partners, LLC Buyout HarbourVest Partners, LLC Credit HarbourVest Partners, LLC Venture Lexington Capital Partners VII Newstone Capital Partners, LLC Permal Private Equity Opportunities IV, L.P. Private Advisors, LLC	78,044 80,092 49,275 82,955 88,082 80,972 62,500 93,750
Total investment management fees	10,277,505
Other investment service fees	
Custodial fees - Mellon Trust Investment consultant fees—New England Pension Consulting Monitor managers' trading processes—Zeno Consulting Group Foreign tax consulting—Pricewaterhouse Coopers Investment salaries	
Total other investment service fees	829,250
Total investment expenses	\$ 11,106,755

# Other Supplementary Information

## **SCHEDULE OF PROFESSIONAL SERVICE FEES**

Service Provider	Nature of Service	Amount
Gabriel, Roeder, Smith & Company	Actuary	\$ 137,980
Levi, Ray & Shoup, Inc.	Plan automation support	\$ 16,200
Bredhoff & Kaiser, P.L.L.C.	Legal counsel	\$ 54,150
Groom Law Group, Chartered	Legal counsel	\$ 5,601
ADP payroll services	Pension disbursement	\$ 42,088
KPMG, LLP	Audit	\$ 47,940
Other various legal fees	Legal	\$ 1,980
Various	Miscellaneous	\$ 17,121
Total professional service fees		\$323,060



Relationships are the foundation for helping children move along the educational continuum and the basis of the "Franconia Elementary Family" comprised of educators, family members, and foremost, students. The school's well attended before and after school programs are a strong example of the firm commitment between parents and teachers to provide ample opportunities for every student to grow and succeed.

## Consultant Report on Investment Activity



October 28, 2013

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, 2013.

As of the June 30th fiscal year-end, the Fund was in compliance with policy ranges, and had 41.4 percent in equities, 7.8 percent in real estate equity, 27.3 percent in bonds, 8.0 percent in hedge fund strategies, 1.3 percent in private equity, 14.1 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  $11.2\%^1$  in the year ending June 30, 2013, which ranked in the  $63^{rd}$  percentile of all public funds within the InvestorForce Universe. Over the last 12 months ending June 30, 2013, ERFC outperformed its assumed actuarial return target of 7.5% by 3.7%. Assets increased from \$1.83 billion at the end of fiscal 2012 to approximately \$1.96 billion as of June 30,  $2013^2$ .

#### **Market Commentary**

The 2013 Fiscal year posted surprisingly strong returns for investors seeking risk even amidst a myriad of macroeconomic concerns. The year ending June 30<sup>th</sup> was largely dominated by headline risks related to the European debt crisis, the fiscal cliff, reports of slowed economic growth in China and emerging markets and the potential wind down of the Fed's quantitative easing program.

In the second half of 2012, domestic equities benefited from improved fundamentals and a more robust housing market, which resulted in gains even amidst the uncertainties surrounding the presidential election and the fiscal cliff. International equity markets, buoyed by positive news flow within the Euro zone and stronger economic data from China, outperformed their domestic counterparts. In the first quarter of 2013, the Fed continued to

\_

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

## Consultant Report on Investment Activity



drive equity markets with stimulative policy as market volatility was suppressed and markets shrugged off worries of fiscal tightening. Global equities surged, with domestic equities posting the strongest quarter for equity returns over the fiscal year. The final quarter of the fiscal year proved to be a challenging environment in which virtually all markets were down, leaving investors no place to run for cover. Treasury yields spiked on expectations of Fed tapering and continued to rise through June. As a result of the sharp rise in rates, investors saw long duration fixed income assets struggle.

The quarter ended September  $30^{\text{th}}$ , 2012 marked a rebound across most asset classes. Second quarter losses were reversed by news of "unlimited support" from the Fed and ECB. The primary take-away from the third quarter of 2012 is that central banks still possess the strength to move markets, but with each move their capacity for future intervention weakens. The S&P 500 produced a +6.4% return for the quarter, while the MSCI Europe, Australia, Far East (EAFE) rose +6.9% and the MSCI Emerging Markets index rose +7.7%. In fixed income, investors ratcheted up risk on the heels of monetary easing by central banks in the U.S. and Europe. In line with investors' demand for yield, emerging markets debt and US high yield rallied. The clamor for risk and higher returns took the shine off safer but lower yielding assets such as Treasuries. The Barclays Capital Aggregate Bond Index posted a return of +1.6% for the quarter.

The quarter ended December 31, 2012 saw mixed results amid uncertainties around the presidential election and the resolution of the fiscal cliff. These macroeconomic issues took a bite out of domestic equity returns as they could not continue the strong performance of the past quarter. To this end, the S&P 500 recorded a -0.4% return for the quarter. However, international equity markets benefited from positive news flows from Europe, Japanese export-driven stocks, and stronger economic data from China and outperformed both domestic and emerging market equities. International stocks, as measured by the MSCI EAFE index, returned +6.6% during the period while emerging market stocks posted a +5.6% gain as measured by the MSCI EM index. Even as massive government stimulus poured into Treasuries, the yield curve shifted upwards in the quarter, retreating from all-time lows. The Barclays Capital Aggregate Bond Index returned +0.2% while the Barclays High Yield index and the JPM GBI-EM GD (unhedged) index returned +3.3% and +4.1, respectively.

U.S. stocks started 2013 with a bang, posting double digit returns across all market capitalizations. Small-caps led the way returning +12.4% as measured by the Russell Small Cap Index, followed by a large cap return of +10.6% as measured by the S&P 500 index. These strong returns were driven by improvements in residential real estate and consumer sentiment domestically. During the quarter, a strong U.S. dollar proved to be a headwind to international markets as international equities lagged with modest returns of +5.1%, according to the MSCI EAFE index. Investor's quest for yield again drove performance for fixed income in the first quarter. Depressed yields for investment grade bonds pushed investors into riskier segments of the market. As a result, the Barclays Aggregate Bond Index returned -0.1%. The below investment grade segment of the bond market continued to outperform in the first quarter. The Barclays High Yield index returned +2.9% with low quality issues outperforming high quality paper.

After a strong first quarter across most asset classes, markets were roiled in the second quarter by indications the Fed would taper its stimulative policy earlier than expected and concerns of slowed growth in China and emerging markets. The higher

## Consultant Report on Investment Activity



volatility environment in late May and June proved to be difficult for almost all asset classes as virtually all markets were negative, leaving investors no place to hide. Domestic and international equities began the quarter strong but then sold off as anticipation of earlier tapering by the Fed set in and a dramatic spike in rates took place. The S&P 500 index returned +2.9% and the MSCI EAFE index returned -1.0%, for the quarter. Investors also experienced a pronounced sell-off in emerging markets as a rise in rates and political turmoil in Brazil and Turkey drove down returns. The MSCI EM was the worst performing equity index as it posted a -8.1% return for the quarter. Over the same period, nearly all global fixed income sectors posted negative returns. The search for yield morphed into a quest for liquidity as longer-duration corporates and emerging markets debt dropped dramatically. The Barclays Aggregate index, which tracks U.S. investment grade fixed income, lost 2.3% in the quarter. Non-investment grade debt struggled as well with the Barclays High Yield index losing 1.4%.

Fiscal year 2013 was a productive time period for the fund with a few important changes to the portfolio. Due to performance concerns, the Plan divested from Alliance Bernstein and hired Causeway as a replacement to manage the international value equity assets. The fund continued to build out the private equity portfolio which grew from a market value of approximately \$15 million in June 2012 to \$24 million as of June 2013. In May, the Board voted to commit \$10 million to Private Advisors SCBO Fund V. In addition the Board approved an updated Investment Policy Statement. The portfolio is well positioned and diversified across asset classes and remains in compliance with policy targets.

Sincerely,

Douglas Moseley, Partner

Keith Stronkowsky, CFA, Consultant

## Strategic Review and Investment Policy

### Introduction

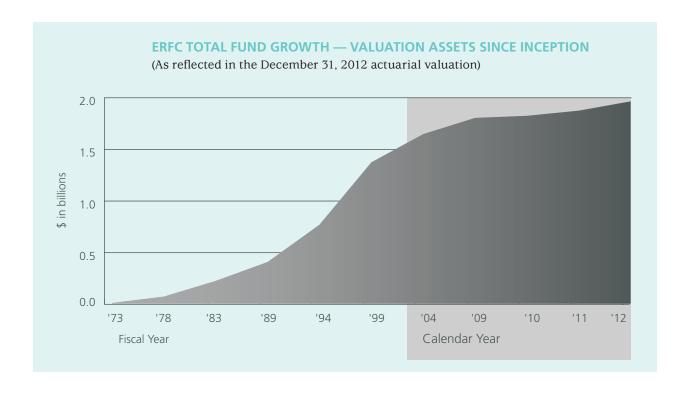
The members of the ERFC Board of Trustees have jurisdiction over and ultimate fiduciary responsibility for the investment of the System's assets. In carrying out their responsibilities, they must adhere to applicable laws, regulations, and rulings with respect to the duties of investment fiduciaries. 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.



# **Investment Managers**

## **ASSETS UNDER MANAGEMENT**

As of June 30, 2013 (\$ in millions)

Investment Manager	Investment Type	Amount
Equities		
Large Capitalization		
Aronson Johnson Ortiz	Value	\$ 121.9
Mellon Capital Management Corp.	Core Index (Russell 1000)	106.7
Turner Investment Partners	Growth	100.9
Small/Mid Capitalization		
Epoch Investment Partners, Inc.	Value	46.9
Lazard Asset Management	Core	46.0
Westfield Capital Management	Growth	43.1
International		
Acadian Asset Management	Core	111.8
AllianceBernstein L.P.	Value	0.1
Causeway Capital	Value	88.4
William Blair & Company	Growth	84.6
William Blair & Company	Emerging Market	59.7
Fixed Income		
Loomis-Sayles & Company	Core Plus	159.4
Mellon Capital Management Corp.	Core Index	114.9
Pacific Investment Management Co.	Core Plus	208.0
Mondrian Investments	Emerging Market	53.5
Global Asset Allocation/Better Beta		
Bridgewater Associates, Inc.	Better Beta	90.6
Wellington Management Co.	Global Asset Allocation	95.7
Pacific Investment Management Co.	Global Asset Allocation	90.3
Hedge fund of funds		
Grosvenor Institutional Partners, L.P.	Hedge Fund of Funds	77.6
Permal Group of Funds	Hedge Fund of Funds	79.3
	Treage I and of I ands	77.5
Private Equity	Deirocks	7.0
Audax Mezzanine Fund III, L.P.	Private	3.0
Lexington Capital Partners VII, L.P.	Private	6.3
Newstone Capital Partners II, L.P.	Private	3.1
Permal Private Equity Opportunities IV, L.P.	Private	2.6
Private Advisors, LLC	Private	5.2
HarbourVest	Private	5.0
Real Estate		
JP Morgan Asset Management	Private	21.6
Prudential Financial	Private	21.1
UBS Realty Investors, LLC	Private	27.6
Center Square Investment Management	Public	81.7
Cash (temporary cash)		1.8
Total		\$ 1,958.4

## **Asset Structure**

EDUCATIONAL EMPLOYEES' SUPPLEMENTARY RETIREMENT SYSTEM OF FAIRFAX COUNTY

## Interim Strategic Target Allocation

The asset structure shown below represents the Trustees' assessment of their optimal asset allocation as of June 30, 2013. 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.

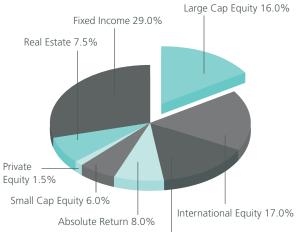
The table below provides a comparison between the target asset mix, consistent with the achievement of the long-term objective of the fund, and the actual asset allocation as of June 30, 2013.

## Actual Asset Allocation

as of June 30, 2013

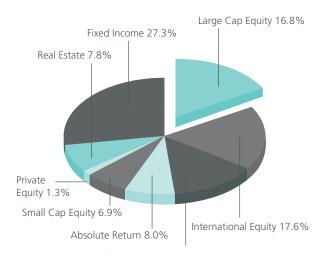
The asset structure of ERFC has historically reflected a proper balance of the fund's needs for liquidity, growth of assets, and risk tolerance. The fund's investment policy is designed to continue to meet its long-term investment objectives while, at the same time, provide increased flexibility to meet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

#### **INTERIM STRATEGIC TARGETS**



Global Asset Allocation/Better Beta 15.0%

### **ACTUAL ASSET ALLOCATION**



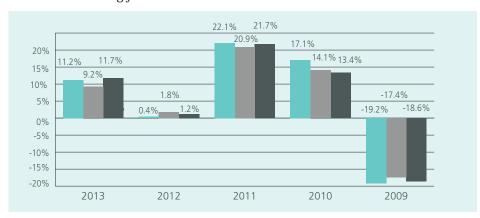
Security Class	Interim Strategic Targets as of June 30, 2013	Actual Asset Allocation as of June 30, 2013
Domestic Large Cap Equity	16.0 %	16.8 %
Domestic Small Cap Equity	6.0	6.9
International Equity	17.0	17.6
Real Estate	7.5	7.8
Fixed Income	29.0	27.3
Global Asset Allocation/Better Beta	15.0	14.1
Absolute Return	8.0	8.0
Private Equity	1.5	1.4
Cash	_	0.1
Total	100.0%	100.0%

## **Investment Results**

## Fiscal Years Ending June 30

## TOTAL FUND RETURNS

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

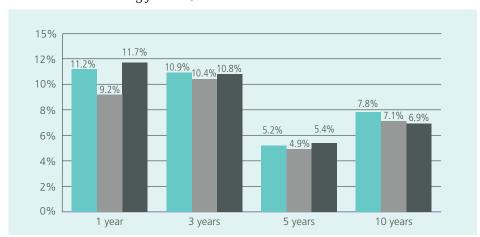


- \* Diversified benchmark is 16.0% Russell 1000, 6.0% Russell 2000, 14% MSCI ACWI Ex-US, 3.0% MSCI Emerging Markets, 3.75% FTSE EPRA/NAREIT, 3.75% NCREIF, 18.0% Barclays Aggregate Bond Index, 4.0% BC Credit, 4.0% BC Long Credit, 7.5% MSCI World Net, 7.5% CitiWorld Govt Bond, 8.0% HFRI FoF, 1.5% Cambridge PE, 3.0% JPM GBIEM
- \*\* New England Pension Consultants Universe

### For the Periods Ending June 30, 2013

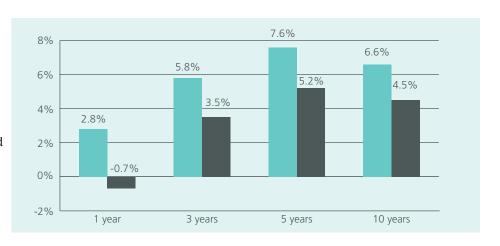
## **TOTAL FUND**

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



## DOMESTIC FIXED INCOME

- Fixed Income
- Benchmark:BarclaysCapitalAggregate Bond

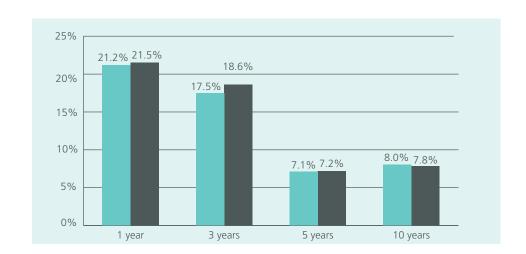


## **Investment Results**

(For the Periods Ending June 30, 2013)

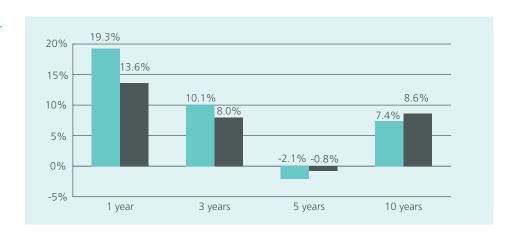
# DOMESTIC EQUITY

- Domestic Equity
- Benchmark: Russell 3000 Index



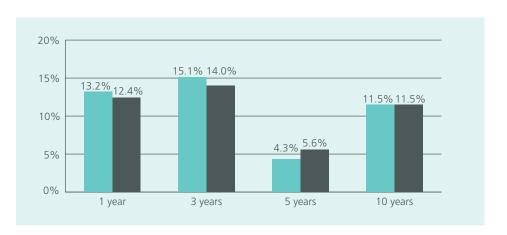
# INTERNATIONAL EQUITY

- 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.

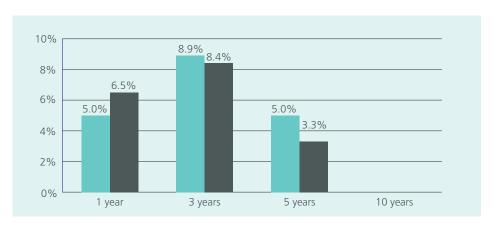
## **Investment Results**

(For the Periods Ending June 30, 2013)

# GLOBAL ASSET ALLOCATION

GAA

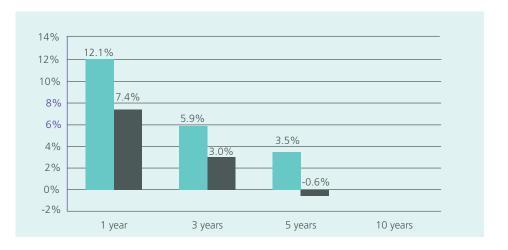
Benchmark: 50% MSCI World / 50% Citi World Govt Bond Index



### **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, 2013)

## **TEN LARGEST EQUITY HOLDINGS\***

No. Shares	Description	Cost	Fair Value	% of Total Portfolio
76,000	EXXON MOBIL CORP	\$ 6,184,994	\$ 6,866,600	0.35%
17,040	APPLE INC	\$ 3,680,017	\$ 6,756,871	0.35%
19,378	ROCHE HLDG AG GENUSSCHEINE NPV	\$ 3,954,969	\$ 4,813,011	0.25%
150,378	ROYAL DUTCH SHELL PLC	\$ 4,866,955	\$ 4,794,926	0.25%
5,000	GOOGLE INC	\$ 3,038,845	\$ 4,401,850	0.23%
81,200	JPMORGAN CHASE & CO	\$ 3,277,189	\$ 4,286,548	0.22%
81,880	CITIGROUP INC	\$ 3,180,336	\$ 3,927,784	0.20%
68,423	BNP PARIBAS EUR2	\$ 4,142,566	\$ 3,733,241	0.19%
146,080	CISCO SYSTEMS INC	\$ 3,038,570	\$ 3,554,857	0.18%
40,600	JOHNSON & JOHNSON	\$ 3,464,999	\$ 3,485,916	0.18%
TOTAL		\$ 38,829,440	\$46,621,604	2.38%

### TEN LARGEST FIXED INCOME HOLDINGS\*

Par Value	Security	Coupon	Maturity	Cost	Fair Value	% of Total Portfolio
5,505,000	INTER-AMERICAN DEVELOPMENT BANK	6.000%	12/15/2017	\$ 3,779,204	\$ 4,565,583	0.23%
5,500,000	INTERNATIONAL BANK FOR RECONST	1.430%	03/05/2014	\$ 3,581,312	\$ 4,362,008	0.22%
3,115,000	GEORGIA-PACIFIC LLC	7.750%	11/15/2029	\$ 2,766,891	\$ 4,016,481	0.21%
3,355,000	NEW SOUTH WALES TREASURY CORP	6.000%	02/01/2018	\$ 3,785,333	\$ 3,389,173	0.17%
2,795,000	OLD REPUBLIC INTERNATIONAL CORP	3.750%	03/15/2018	\$ 2,743,203	\$ 3,144,375	0.16%
3,495,000	U S TREASURY BOND	2.875%	05/15/2043	\$ 3,220,516	\$ 3,093,075	0.16%
3,120,000	U S TREASURY BOND	2.750%	11/15/2042	\$ 2,789,963	\$ 2,690,033	0.14%
2,534,337	TRINITY RAIL LEASING 1A A 144A	5.194%	10/16/2040	\$ 2,534,337	\$ 2,587,862	0.13%
2,190,000	INTEL CORP	2.950%	12/15/2035	\$ 2,161,153	\$ 2,383,005	0.12%
2,425,000	SPRINGLEAF FINANCE CORP	6.900%	12/15/2017	\$ 2,369,453	\$ 2,379,531	0.12%
TOTAL				\$29,731,365	\$32,611,126	1.67%

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

# Schedule of Brokerage Commissions

			Base	Commission
Broker Name	Base Volume	Total Shares	Commission	Percentage
INSTINET EUROPE LIMITED, LONDON	\$126,341,570	9,210,333	\$67,837	0.05
DEUTSCHE BK SECS INC, NY (NWSCUS33)	86,983,367	4,093,199	37,811	0.04
BNY CONVERGEX / LJR, HOUSTON	56,302,036	1,884,206	73,881	0.13
CREDIT SUISSE, NEW YORK (CSUS)	55,360,913	2,962,310	34,751	0.06
SG AMERICAS SECURITIES LLC, NEW YORK	49,065,427	1,849,226	16,102	0.03
BARCLAYS CAPITAL LE, JERSEY CITY	28,767,470	961,924	15,062	0.05
CITIGROUP GBL MKTS INC, NEW YORK	28,345,028	1,090,365	18,614	0.07
MORGAN STANLEY & CO INC, NY	27,976,672	3,433,735	20,086	0.07
LIQUIDNET INC, BROOKLYN	27,526,793	903,369	19,846	0.07
UBS SECURITIES LLC, STAMFORD	27,045,022	919,458	16,480	0.06
CREDIT SUISSE (EUROPE), LONDON	22,589,149	2,045,556	19,741	0.09
INVESTMENT TECHNOLOGY GROUP, NEW YORK	20,280,247	668,037	13,367	0.07
GOLDMAN SACHS & CO, NY	19,982,451	1,716,480	16,733	0.08
UBS EQUITIES, LONDON	19,294,470	1,787,559	16,425	0.09
ROSENBLATT SECURITIES LLC, JERSEY CITY	13,706,292	347,500	5,286	0.04
PULSE TRADING LLC, BOSTON	12,566,171	305,370	4,262	0.03
INSTINET, PARIS	12,237,843	924,120	6,425	0.05
J P MORGAN SECS LTD, LONDON	12,124,363	851,917	10,399	0.09
SG SECURITIES, HONG KONG	12,075,137	6,155,157	7,397	0.06
JEFFERIES & CO INC, NEW YORK	11,241,526	349,361	9,562	0.09
MERRILL LYNCH INTL LONDON EQUITIES	9,697,568	1,278,874	9,997	0.10
BARCLAYS CAPITAL, LONDON (BARCGB33)	9,551,381	1,725,535	7,637	0.08
J.P. MORGAN CLEARING CORP, NEW YORK	9,364,680	688,885	6,807	0.07
CITIGROUP GBL MKTS/SALOMON, NEW YORK	8,973,325	1,837,971	6,483	0.07
INSTINET PACIFIC LTD, HONG KONG	8,899,590	3,558,110	4,451	0.05
INVESTMENT TECHNOLOGY GROUP LTD, DUBLIN	8,764,413	524,164	4,635	0.05
DAIWA SECS (HK) LTD, HONG KONG	8,197,198	6,650,937	4,006	0.05
UBS WARBURG ASIA LTD, HONG KONG	7,656,604	3,954,542	6,176	0.08
GUZMAN & CO, NEW YORK	7,406,622	154,400	3,088	0.04
J P MORGAN SECURITIES INC, BROOKLYN	6,587,034	195,795	6,598	0.10
CITIGROUP GLOBAL MARKETS LTD, LONDON	6,403,879	1,287,859	6,097	0.10
		696,581		
INSTINET AUSTRALIA CLEARING SERV, SYDNEY	6,154,775	, ,	3,770	0.06
INSTINET CORP, NY MERRILL LYNCH DIERCE EENNER SMITH INC NY	6,080,482	151,945 209,785	2,789	0.05
MERRILL LYNCH PIERCE FENNER SMITH INC NY	5,839,366		5,173	0.09
SG SEC (LONDON) LTD, LONDON	5,585,270	497,804	4,876	0.09
RBC CAPITAL MARKETS LLC, NEW YORK	5,118,116	174,221	3,688	0.07
BERNSTEIN SANFORD C & CO, NEW YORK	4,951,175	130,090	3,876	0.08
FRANK RUSSELL SEC INC, NEW YORK	4,798,176	89,520	3,581	0.07
BROADCOURT CAP CORP/SUB OF MLPF&S,NY	4,635,480	161,135	6,437	0.14
CREDIT AGRICOLE CHEUVREUX, COURBEVOIE	4,479,205	441,782	4,090	0.09
MERRILL LYNCH PIERCE FENNER, WILMINGTON	4,409,851	247,700	4,724	0.11
SANFORD C. BERNSTEIN & CO, WHITE PLAINS	4,357,299	2,946,827	1,448	0.03
BLOOMBERG TRADEBOOK LLC, NEW YORK	4,114,906	131,990	2,640	0.06
MACQUARIE BANK LTD, HONG KONG	3,978,833	1,623,683	3,364	0.08
NOMURA SECS INTL INC, NEW YORK	3,944,389	549,376	2,947	0.07
OTHER BROKERS	137,339,884	17,560,411	132,829	0.10
TOTAL	\$ 967,101,448	89,929,104	\$ 682,274	

# **Investment Summary**

EDUCATIONAL EMPLOYEES' SUPPLEMENTARY RETIREMENT SYSTEM OF FAIRFAX COUNTY

	AS OF JUNE	30, 2013	AS OF JUNE	30, 2012
	% Market			% Market
	Market Value	Value	Market Value	Value
Fixed Income				
U.S. Government obligations	\$22,836,510	1.2%	\$-	0.0%
Mortgage-backed securities	3,973,060	0.2%	1,523,586	0.1%
Domestic corporate bonds	84,011,424	4.3%	90,424,608	4.9%
Convertible bonds	12,143,244	0.6%	11,457,800	0.6%
International bonds	38,735,376	2.0%	41,750,081	2.3%
Preferred stocks	2,409,937	0.1%	6,877,879	0.4%
Index / Commingled fund	356,838,334	18.4%	361,914,042	19.9%
Total fixed income	520,947,885	26.8%	513,947,996	28.2%
Domestic Equities:				
Basic industry	66,136,779	3.4%	58,683,212	3.2%
Consumer and services	110,471,161	5.7%	98,920,238	5.4%
Financial and utility	81,022,092	4.1%	52,127,231	2.8%
Technological	60,526,874	3.1%	69,981,295	3.8%
Index / Commingled fund	106,662,381	5.5%	110,603,943	6.0%
Total domestic stock	424,819,287	21.8%	390,315,919	21.2%
International Equity				
Basic industry	74,770,555	3.8%	69,024,421	3.8%
Consumer and services	100,604,259	5.1%	71,206,787	3.9%
Financial and utility	75,408,684	3.9%	48,910,078	2.7%
Technological	33,706,829	1.7%	29,779,605	1.6%
Index / Commingled fund	75,141,087	3.8%	76,397,734	4.2%
Total international stock	359,631,414	18.3%	295,318,625	16.2%
Real Estate				
Commercial	55,423,279	2.8%	51,848,635	2.8%
Commingled	103,294,385	5.3%	98,237,115	5.4%
Total real estate	158,717,664	8.1%	150,085,750	8.2%
Alternative investments				
Better beta	90,595,119	4.6%	103,425,441	5.7%
Global asset allocation	186,066,940	9.5%	184,473,015	10.1%
Hedge fund of funds	156,881,646	8.0%	139,115,563	7.6%
Limited partnerships	25,221,027	1.3%	15,537,604	0.8%
Total alternative investments	458,764,732	23.4%	442,551,623	24.2%
Subtotal investments at fair value	1,922,880,982	98.4%	1,792,219,913	98.0%
Short-term Investments				
Money Market	30,897,541	1.6%	37,909,533	2.0%
Total short-term investments	30,897,541	1.6%	37,909,533	2.0%
Total	\$ 1,953,778,523	100.0%	\$ 1,830,129,446	100.0%

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

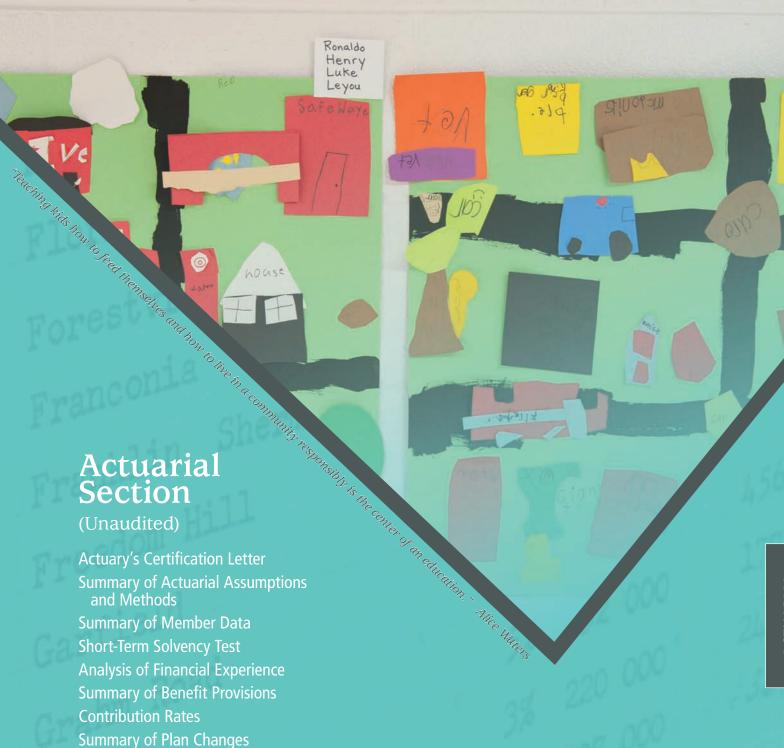
# Schedule of Investment Management Fees

(Year Ended June 30, 2013)

Investment Category A	ssets Under Management	Expense
Better beta	\$ 90,595,119	\$ 491,033
Domestic equity managers	464,334,828	1,234,298
Fixed income managers	510,786,422	1,413,306
Global asset allocation manager	s 186,066,940	1,833,687
Hedge fund of funds	156,881,646	1,430,629
International equity managers	336,997,659	1,963,158
Private equity	25,221,028	615,670
Real estate managers	151,997,340	1,295,724
Total	\$ 1,922,880,982	\$ 10,277,505

Note: Excludes cash and cash equivalents

# Our Communities



Community outreach is prevalent at Franconia Elementary as demonstrated through a long-standing relationship with CALIBRE, a Management Consulting and Technology Services Company. CALIBRE employees volunteer their time at Franconia with tutoring and mentoring activities and Franconia students adorn CALIBRE corridors with art displays and live performances demonstrating the value of cooperative partnership for building a strong community.

## Actuary's Certification Letter



Gabriel Roeder Smith & Company Consultants & Actuaries One Towne Square Suite 800 Southfield, MI 48076-3723 248.799.9000 phone 248.799.9020 fax www.gabrielroeder.com

July 31, 2013

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, 2012.

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 also audits the actuarial data annually.

The actuary prepared the following supporting 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

# **ACTUARIAL**

## Actuary's Certification Letter

Board of Trustees July 31, 2013 Page 2

Summary of Member Data Included in Valuation as of December 31, 2012
Active Members by Years of Service on December 31, 2012
All Active Members in Valuation on December 31, 2012 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

#### **Financial Section**

Schedule of Funding Progress Schedule of Employer Contributions Summary of Actuarial Methods and Assumptions

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. The assumptions comply with the requirements of Statement No. 25 of the Governmental Accounting Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. The December 31, 2012 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, 2012 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

he 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).

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

	PAY	TON	
Service Index	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									
			DE	ATH		DISABILTY				OTHER	
		Ordinary		D	uty	Ord	inary	D	uty		
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.

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

	<i>ERFC</i> (Hired be	fore 7/1/2001)	ERFC 2001 (Hired on or after 7/1/2001)					
	TYPE OF RE	TIREMENT	-	TYPE OF RETIRE	MENT			
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					

**TABLE D: Single Life Retirement Values** 

STANDARD MORTALITY									
Sample Attained Ages		\$1 Monthly for Life 3% Annually	Future Life Expectancy (years)						
	Men	Women	Men	Women					
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					

## **DISABLED MORTALITY**

Sample Attained Ages		1 Monthly for Life 8% Annually	Future Life Expectancy (years)		
	Men	Women	Men	Women	
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	

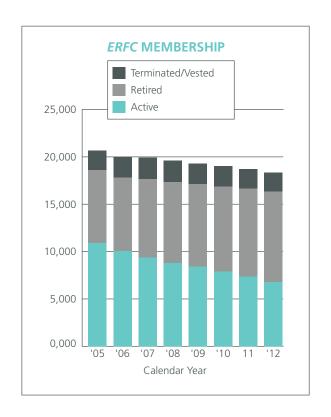
## **TABLE E: Rates of Forfeiture Following Vested Separation**

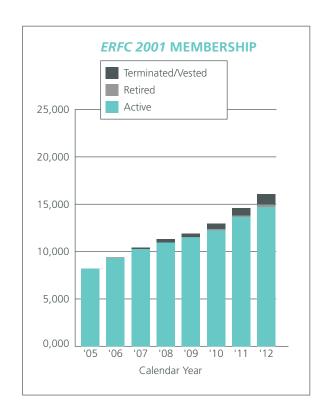
Forfeiture occurs when a vested person separates from service and withdraws contributions thereby forfeiting future rights to an employer financed benefit. The total probability of forfeiture is obtained by multiplying the probability of "other separation" from Table B by the probability of forfeiture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

#### **SAMPLE ENTRY AGE**

Age at Separation	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

(Last Eight Years)





		ERFC			ERFC 2001			
	Year	Active	Retired	Terminated/ Vested	Active	Retired	Terminated/ Vested	Total
Calendar Year	2005	10,895	7,710	2,030	8,186			28,821
(As of December 31)	2006	10,065	7,710	2,179	9,306	6	65	29,331
	2007	9,350	8,333	2,249	10,249	21	157	30,359
	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

(As of December 31, 2012)

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

		YEARS OF SERVICE TO VALUATION DATE						TOTALS		
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary	Average
30-34	1	4	35	1				40	\$2,442,197	\$61,055
35-39	4	43	439	51				537	38,138,067	71,021
40-44	10	79	452	427	37	1		1,006	77,111,173	76,651
45-49	9	44	364	312	222	42	1	994	76,741,452	77,205
50-54	4	36	368	308	268	204	23	1,211	93,801,027	77,458
55-59	3	20	469	344	287	169	69	1,361	102,785,627	75,522
60		2	99	70	68	33	14	286	21,481,373	75,110
61	2	5	95	64	41	30	14	251	18,348,154	73,100
62	2	1	63	79	56	18	15	232	17,491,587	75,395
63		1	69	65	46	29	15	224	17,176,918	76,683
64		1	52	58	44	20	7	182	13,009,014	71,478
01		1	02	50	11	20	,	102	13,007,011	71,170
65	1	2	47	42	41	13	4	150	10,853,054	72,354
66		2	30	33	31	9	4	109	7,816,597	71,712
67			10	21	19	6	1	57	4,699,380	82,445
68			18	9	12	5	2	46	3,464,715	75,320
69			7	9	8	4	2	30	2,149,896	71,663
70			13	9	12	4	3	41	3,034,459	74,011
71				2	4	3	3	12	797,310	66,443
72			3	4	2		3	12	751,917	62,660
73			3	4		1		8	454,829	56,854
74			1	1		1		3	157,440	52,480
75 & over			1	1	3	2	2	9	526,019	58,447
Total	34	239	2,638	1,913	1,201	594	182	6,801	\$513,232,205	\$75,464

(As of December 31, 2012)

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

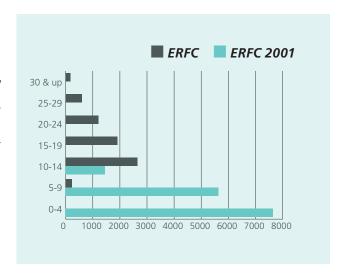
	YEARS O	OF SERVICE 1	TO VALUAT		TOTALS		
Age Group	0-4	5-9	10-14	15 & up	No.	Salary	Average
15-19	2				2	\$54,681	\$27,341
20-24	714				714	30,436,982	42,629
25-29	2,500	360			2,860	137,559,631	48,098
30-34	1,306	1,515	176		2,997	162,243,450	54,135
35-39	648	788	264		1,700	99,484,260	58,520
40-44	735	634	191		1,560	88,586,345	56,786
45-49	649	601	151		1,401	74,937,107	53,488
50-54	541	721	217		1,479	76,738,647	51,885
55-59	352	545	253		1,150	64,995,545	56,518
60	37	88	32		157	8,778,052	55,911
61	30	81	32		143	8,258,392	57,751
62	28	60	31		119	7,003,328	58,852
63	32	65	24		121	6,822,742	56,386
64	24	53	26		103	6,353,196	61,682
65	12	36	16		64	3,446,255	53,848
66	10	29	10		49	3,205,677	65,422
67	7	13	5		25	1,431,214	57,249
68	9	15	4		28	1,422,502	50,804
69	1	11	3		15	1,003,107	66,874
70	2	7	2		11	530,951	48,268
71	2	8			10	518,079	51,808
72	1	2	1		4	218,279	54,570
74			1		1	84,939	84,939
75 & OVER		4	1		5	190,941	38,188
Total	7,642	5,636	1,440	~	14,718	\$784,304,302	\$53,289

(As of December 31, 2012)

## **ACTIVE MEMBER YEARS OF SERVICE**

Average Service = 8.8 years

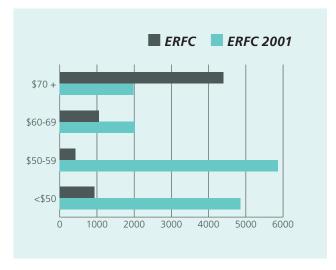
	0-4	5-9	10-14	15-19	20-24	25-29	30 & up
ERFC	34	239	2,638	1,913	1,201	594	182
ERFC 2001	7,642	5,636	1,440	-	-	-	-



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

Average Annual Pay = \$60,297

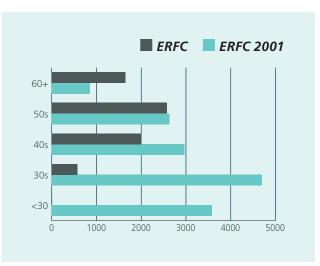
	<\$ 50	\$ 50-59	\$ 60-69	\$ 70+
ERFC	929	416	1,053	4,403
ERFC 2001	4,856	5,858	2,024	1,980



### **ACTIVE MEMBER AGES**

Average Age = 43.5 years Total Active Members = 21,519

	<30	30's	40's	50's	60+
ERFC	0	577	2,000	2,572	1,652
ERFC 2001	3,576	4,697	2,961	2,629	855



(Last Eight Years)

### **ACTIVE MEMBER VALUATION DATA**

Valuation Date	Annual Number	Annual Payroll	Annual Average Pay	% Increase in Avg. Annual Pay
December 31, 2005	19,081	\$ 1,050,216,544	\$ 55,040	5.4
December 31, 2006	19,371	\$ 1,111,827,576	\$ 57,396	4.3
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

## **RETIREES AND BENEFICIARIES ADDED AND REMOVED**

ADDED TO PAYROLL				VED FROM YROLL	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									
2005	481	\$ 615,969	201	\$ 106,627	7,710	\$ 9,587,825	\$ 1,244	8.06	
2006	531	\$ 729,364	212	\$ 124,532	8,029	\$ 10,124,699	\$ 1,261	5.60	
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	

## **Short-Term Solvency Test**

If the contributions to ERFC 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 AG	Last 20 years	UED LIABILITIES				
Valuation	(1) (2) Retirants Member and		(3) Members (Employer Financed	Valuation	Portion of Accrued Liabilities Covered by Assets		
Date	Contributions	Beneficiaries	Portion)	Assets	(1)	(2)	(3)
		(\$ in thousands	)				
@# 6/30/1993	\$ 115,312	\$ 344,160	\$ 448,895	\$ 717,701	100%	100%	58%
6/30/1994	129,428	374,849	467,802	766,480	100	100	56
\$ 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

<sup>@</sup> 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)

	ECONOMIC RISK AREA			DEMOGR	RAPHIC RISK	TOTAL GAIN (LOSS)		
Experience Period	Pay Increases	Investment Return	Age and Service Retirement	Disability and Death- in Service	Other Separations	Other	Amount	Percent of Liabilities
For Periods E	nding June 30	)						
#1993-94	\$ (4.1)	\$ 4.7	\$ (1.6)	\$ (3.7)	\$ 3.5	\$ (15.2)	\$ (16.4)	(1.8)%
1994-95	(9.7)	25.2	5.1	(1.4)	(4.4)	(5.5)	9.3	0.9
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)

Eor	Dorioda	Ending	December	71
LOL	remous	EHUHHE	December	21

@2003-04	Due to trai	nsition to calendo	ar year valuatio	ns, a gain/loss (	analysis was no	ot conducted j	for this valua	tion period.
#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)

- # 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, multplied 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 greater of the amount payable at the age the member becomes eligible for full Social Security benefits according to June 30, 1987 provisions or the amount payable at that age 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 average annual salary multiplied by years of credited service, and
- (ii) means 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 the member is younger than age 65 and 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.

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 3-year average annual salary multiplied by years of credited service.

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

**Reduced Service Retirement:** Amount After **25 Years Service.** Service Retirement amount actuarially 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 is actuarially reduced to reflect that the retirement age is 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 3-year average annual salary 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.

**Death-in-Service Benefits:** An active member with 5 or more years of service who dies will have benefits payable to the surviving spouse and/or dependent children. The 5 year service requirement is waived if the death is service-connected and the member's benefit includes service credit that the member would have earned between the date of death and eligibility for service retirement (with a minimum of 10 years of service used).

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

**Member Contributions:** Members contribute 4 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 (½ 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) ½ of 1 percent for the first 60 months and 4/10 of 1 percent for each additional month between the member's age at the date of death and age 60, and

2) ½ 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 4 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)

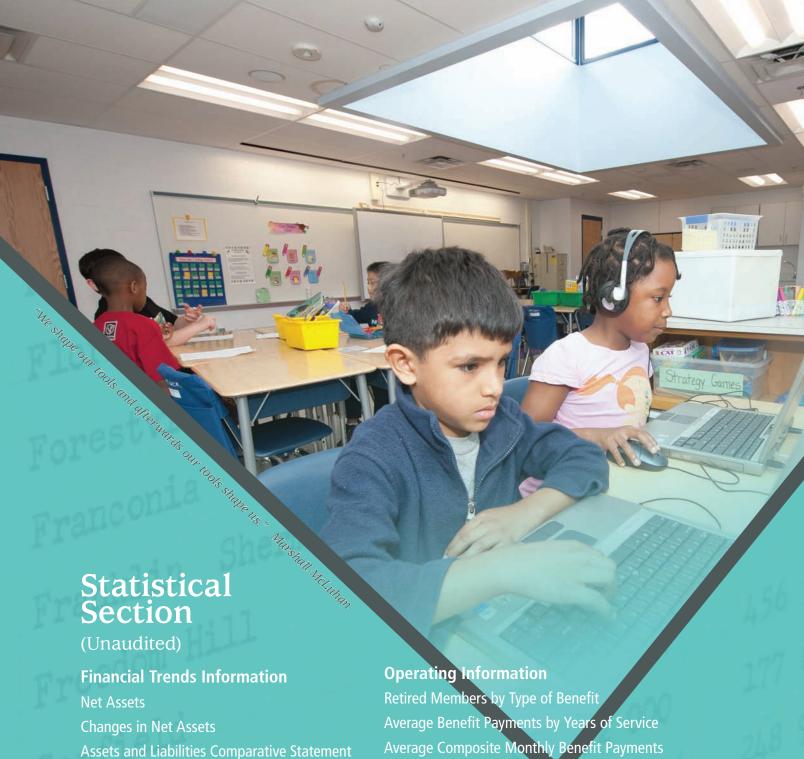
CIII	DT E	MIDI	OVEEC

## **INSTRUCTIONAL EMPLOYEES**

	5UP	PORT EMPLOY	EES	INSTRU	CHONAL EMPL	.OYEES
Fiscal Year	Employee	Employer	Total	Employee	Employer	Total
1994	2.00%	5.08%	7.08%	2.00%	5.53%	7.53%
1995	2.00	5.08	7.08	2.00	5.53	7.53
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
ERFC began us	sing composite 1	rates effective Jul	y 1, 1999			
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			

## Summary of Plan Changes

There were no significant plan changes during the valuation period ending December 31, 2012.



Benefit Deductions by Type Benefit Refunds by Type

Current Benefits by Attained Ages Deferred Benefits by Attained Ages

Renovation brings technological advances. Franconia Elementary let the light into interior rooms with Solatube lighting and clerestory windows as a solution to windowless spaces in 2012. Solatube tubular devices draw natural light into spaces where traditional skylights and windows can't reach and clerestory (pronounced clear story) walls rise higher than the surrounding roofs and are filled with windows to light interior spaces. Students and staff connect to the outdoor environment while remaining energy efficient.

## **Net Assets**

Last Ten Fiscal Years

FISCAL YEARS	NET ASSETS
2004	¢ 1 520 120 115
2004	\$ 1,528,120,115
2005	\$ 1,647,713,156
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

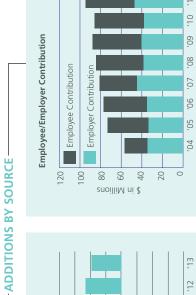


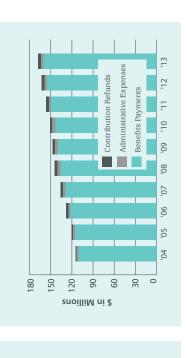
## EDUCATIONAL EMPLOYEES' SUPPLEMENTARY RETIREMENT SYSTEM OF FAIRFAX COUNTY

## Changes in Net Assets

Last Ten Fiscal Years

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ADDITIONS										
Employee contributions	\$ 22,340,870	\$ 39,818,585	\$ 42,292,828	\$ 44,453,617	\$ 46,143,803	\$ 47,996,408	\$ 47,918,341	\$ 47,167,129	\$ 49,142,379	\$ 38,428,367
Employer contributions	37,331,203	32,198,596	34,648,918	36,644,001	38,334,140	40,012,480	37,868,623	47,118,111	52,934,245	67,734,634
Investment income (net of expenses)	233,807,964	168,479,920	169,944,356	304,119,327	(96,855,060)	(357,672,266)	231,574,404	341,669,367	1,635,435	190,947,851
Gain\loss from sale of capital assets	l	1	1	27,632	1	(5,494)	1	(1,503)	1	l
Total additions to plan net assets	293,480,037	240,497,101	246,886,102	385,244,577	(12,377,117)	(269,668,872)	317,361,368	435,953,104	103,712,059	297,110,852
DEDUCTIONS										
Benefit payments	110,236,424	114,999,379	121,687,318	128,739,638	135,927,308	139,594,144	143,128,569	149,046,042	155,041,762	160,098,128
Contribution refunds	1,996,947	2,794,118	3,087,501	3,583,007	4,229,850	3,975,907	3,339,910	4,258,033	4,295,171	4,419,806
Administrative expenses	2,918,778	3,110,563	3,289,518	3,718,761	4,631,844	3,898,620	4,663,896	3,344,333	3,574,923	3,588,414
Total deductions to plan net assets	115,152,149	120,904,060	128,064,337	136,041,406	144,789,002	147,468,671	151,132,375	156,648,408	162,911,856	168,106,348
Change in net assets net of expenses	\$ 178,327,888	\$ 119,593,041	\$ 118,821,765	\$ 249,203,171	\$ (157,166,119)	\$ (417,137,543)	\$ 166,228,993	\$ 279,304,696	\$ (59,199,797)	\$ 129,004,504





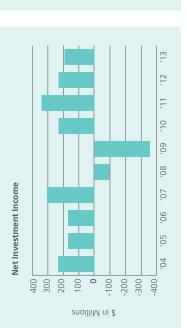
73

110 60,

80

.07 90, 105

**DEDUCTIONS BY TYPE** 



71

## Assets and Liabilities Comparative Statement

Last 20 Years—Dollars in Thousands

		СОМ	PUTED LIABI	LITIES			
Valuation Date	Active Member Payroll	Retired	Members	Total	Valuation Assets	[Excess of Assets] Unfunded Accrued Liabilities	Funded Percent
@# 6/30/1993	\$ 450,530	\$ 344,160	\$ 564,207	\$ 908,367	\$ 717,701	\$ 190,666	79.0 %
6/30/1994	480,995	374,849	597,230	972,079	766,480	205,599	78.8
\$ 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

<sup>@</sup> After change in asset valuation method.

<sup>\$</sup> After change in benefits.

<sup>#</sup> After changes in actuarial assumptions.

EDUCATIONAL EMPLOYEES' SUPPLEMENTARY RETIREMENT SYSTEM OF FAIRFAX COUNTY

# Benefit Deductions from Net Assets by Type

Last Ten Years

		SERVICE	SERVICE BENEFITS		DEATH	DEATH BENEFITS		DISABILITY BENEFITS	BENEFIT	S		
		Normal		Early	Duty/I	Duty/Non-Duty		Duty	No	Non-Duty	To	Total
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Participants	Benefits
Calendar Years	Years											
2004	3,890	77,911,030	3,174	29,941,238	1111	812,149	26	298,169	229	1,066,414	7,430	110,029,000
2005	3,989	81,734,466	3,364	32,279,036	110	850,781	27	309,656	220	1,049,826	7,710	116,223,765
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
Fiscal Years	ars											
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

## Benefit Refunds by Type

Last Ten Years

	SEP	ARATION	DI	EATHS		TOTAL
Fiscal Year	No.	Amount	No.	Amount	No.	Amount
2004	719	\$ 1,840,349	15	\$ 156,598	734	\$ 1,996,947
2005	871	\$ 2,620,070	26	\$ 174,048	897	\$ 2,794,118
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

## Retired Members by Type of Benefit

(As of December 31, 2012)

Amount	Number		TYPE OF	RET	REMENT*				OPTI	OPTION SELECTED**	TED**	
Benefit	Members	-	2	æ	4	2	Basic Benefit	-	2	8	4	5
\$ 1-\$ 250	1,678	336	1,273	27	35	7	1,256	73	9	43	22	278
251-500	1,488	483	698	16	115	72	1,111	73	11	35	27	231
501-750	826	344	455	8	17	2	592	30	10	24	17	153
751-1,000	854	517	312	10	15	l	627	22	23	39	7	136
1,001-1,250	824	969	219	2	7	l	654	17	11	32	7	103
1,251-1,500	229	609	161	3	4	l	499	22	10	36	2	105
1,501-1,750	636	522	114	l	l	l	448	23	11	35	9	113
1,751–2,000	516	439	74	2	l	1	367	10	11	31	2	92
Over 2,000	2,289	1,733	546	4	1	9	1,165	115	111	140	19	839
Total	9.788	5,479	4,023	72	193	21	6,719	385	104	415	115	2,050

		١
ŀ		
i		2
L	į	j
Ę	5	S
1	Ī	i
7	į	
ŀ		
Ĺ		Į
	1	_
L	i	
1		١
•		•
Ļ	ļ	J
٤	2	
2	>	
ŀ		

1 Full Service

2 Reduced Service

3 Ordinary Death

4 Ordinary Disability

5 Service Connected Disability

## \*\* OPTION SELECTED:

Basic Benefit

1 Beneficiary receives 100% of member's reduced monthly benefit

2 Beneficiary receives 67% of member's reduced monthly benefit

3 Beneficiary receives 50% of member's reduced monthly benefit

4 Beneficiary receives a specified number of payments equal to 120 minus the number of payments the member has received.

5 Member receives partial lump sum and reduced monthly benefit

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+
Retirement Effective Dates						
Period 1/1/08 to 12/31/08						
Avg Monthly Benefit	\$ 273.32	\$ 360.11	\$ 730.56	\$ 905.71	\$ 2,442.16	\$ 2,721.16
Avg Final Average Salary	\$ 4,807.02	\$ 4,918.32	\$ 5,626.34	\$ 5,648.77	\$ 6,985.58	\$ 7,405.08
No. of Retired Members	64	60	80	45	146	49
Period 1/1/09 to 12/31/09						
Avg Monthly Benefit	\$ 237.69	\$ 390.72	\$ 791.10	\$ 1,067.98	\$ 2,451.95	\$ 2,782.62
Avg Final Average Salary	\$ 4,839.74	\$ 4,776.32	\$ 5,974.65	\$ 6,496.54	\$ 7,376.69	\$ 7,595.88
No. of Retired Members	58	63	58	59	115	56
Period 1/1/10 to 12/31/10						
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
Period 1/1/11 to 12/31/11						
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
Period 1/1/12 to 12/31/12						
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

## Average Composite Monthly Benefit Payments for Retirees

Last Ten Years

## BY TYPE OF BENEFIT BEING PAID

	Year	Service Retirement	Reduced Service	Ordinary Disability
Fiscal Year	2003	\$ 1,617	\$ 783	\$ 478
Calendar Year	2004	\$ 1,663	\$ 784	\$ 446
	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

## Retirees and Beneficiaries Current Annual Benefits Tabulated by Attained Ages

(As of December 31, 2012)

			TOTAL
	Attained Ages	No.	Annual Amount
	Under 40	6	\$ 17,784
	40-44	6	30,617
	45	1	2,895
	46	1	811
	47	2	6,479
	48	2	30,513
	49	8	25,322
	50	6	94,067
	51	3	53,448
	52	7	174,006
	53	13	366,264
	54	20	620,611
	55	82	1,860,372
	56	137	3,184,796
	57	165	3,670,196
	58	207	4,941,350
	59	222	5,289,178
	60	319	7,062,663
	61	369	7,884,224
	62	432	9,196,678
	63	486	11,452,903
	64	582	12,911,224
	65	737	15,964,074
	66	589	6,700,078
	67	455	4,512,260
	68	466	5,064,156
ote: This source of information	69	443	4,816,974
esented is from the most recent	70-74	1,707	18,818,441
tuarial valuation report.	75-79	1,180	15,232,369
	80 & Up	1,135	12,649,317
	Grand Total	9,788	\$152,634,070

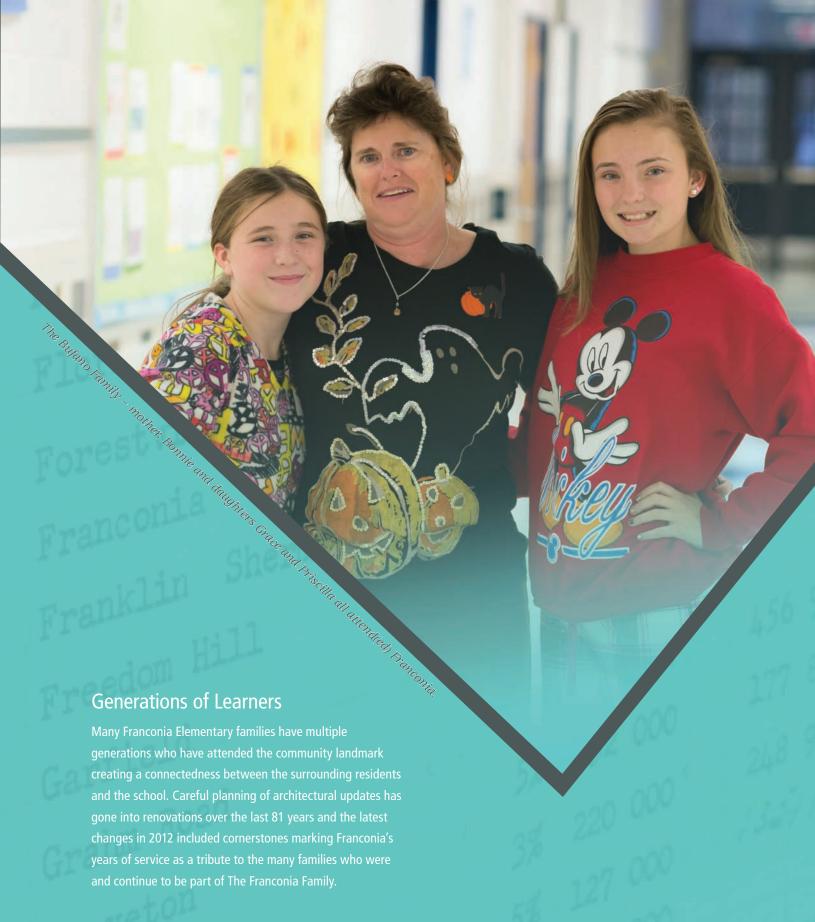
## Inactive Vested Members Deferred Benefits by Attained Ages

(As of December 31, 2012)

		TOTAL	
	Attained Ages	No.	Annual Amount
	26	2	\$ 11,571
	27	2	4,875
	28	22	74,154
	29	32	113,622
	30	50	181,230
	31	81	293,887
	32	80	291,691
	33	103	360,453
	34	113	366,634
	35	117	326,299
	36	129	352,995
	37	116	282,854
	38	134	274,374
	39	118	249,767
	40	113	231,005
	41	139	357,255
	42	140	337,145
	43	127	327,307
	44	116	320,127
	45	113	293,565
	46	100	226,335
	47	101	254,566
	48	84	191,380
	49	88	249,325
	50	85	241,432
	51	75	244,688
	52	86	255,017
	53	80	353,373
	54	73	256,061
	55	59	189,615
	56	58	181,828
	57	53	143,810
	58	50	200,936
	59	57	199,465
	60	41	134,064
	61	36	161,177
<b>Note:</b> This source of information	62	31	145,388
presented is from the most recent	63	24	109,158
actuarial valuation report.	64	27	148,931
	65 & Over	44	119,893
	Grand Total	3,099	\$ 9,057,252

This page is intentionally left blank.





## ON OUR FRONT COVER

The Hester Family includes multiple generations of Franconia learners. (Pictured R-L) Lester Dove Sr.,1940's, Brandon Hester, 5th grader, Gabrielle Hester, 3rd grader, Sharon Hester 1970's. Lester's father (not pictured) Vernon S. Dove, attended the original Franconia School when it opened as a one room schoolhouse in the 1920's.



ERFC would like to thank the staff and administrators of Franconia

Elementary School for allowing us the opportunity to feature your

Generations of Learners in our 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.

**Educational Employees' Supplementary Retirement System of Fairfax County** 8001 Forbes Place | Suite 300 | Springfield, VA 22151-2205