



# **Table of Contents**

<b>Introductory Section (Unaudited)</b>	
Letter of Transmittal	
Certificate of Achievement for Excellence in Finan	cial Reporting
Board of Trustees	
Administrative Organization	······································
Organization Chart	
Summary of Plan Provisions	
<b>Financial Section</b>	
Independent Auditors' Report	
Management's Discussion and Analysis (Unaudited	
Summary Schedule of Plan Fiduciary Net Po	
Summary Schedule of Additions and Deduct	
Basic Financial Statements	
Statement of Fiduciary Net Position	
Statement of Changes in Fiduciary Net Posit	
Notes to the Financial Statements	2
Required Supplementary Information	
Schedule of Changes in Net Pension Liability	y and Related Ratios
Schedule of Net Pension Liability	
Schedule of Employer Contributions	
Schedule of Money-Weighted Rate of Return	
Additional Supplementary Information	
Schedule of Investment and Consultant Expe	nses
Schedule of Administrative Expenses	
<b>Investment Section (Unaudited)</b>	
Chief Investment Officer's Letter	
Investments by Category and Investment Manager	4
Schedule of Ten Largest Equity and Fixed Income	Holdings4
Schedule of Brokerage Commissions	4
Investment Summary	50
<b>Actuarial Section (Unaudited)</b>	
Actuary's Certification Letter	5
Summary of Valuation Results	
Future Outlook	59
Summary of Principal Plan Results	6
Summary of Actuarial Assumptions and Methods .	6
Long Term Assumptions	6
Analysis of Financial Experience	
Schedule of Retirees and Beneficiaries Added To a	nd Removed From Rolls 7
Solvency Tests	
<b>Statistical Sections (Unaudited)</b>	
Schedule of Additions by Source	
Schedule of Deductions by Type	
Schedule of Benefit Payments by Type	
Schedule of Retired Members by Benefit Type	
Schedule of Average Monthly Benefit Amounts	
Schedule of Average Monthly Benefit by Years of	Service 7



# County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

December 5, 2014

Dear Members of the Board of Trustees:

I am pleased to submit to you the annual report of the Fairfax County Uniformed Retirement System (System) for the fiscal year ended June 30, 2014. This annual report is provided as an aid to understanding the structure and evaluating the status of the System. The System's management is responsible for the accuracy of financial information contained herein. The Management's Discussion and Analysis provides further detail to the financial statements.

#### History

The Fairfax County Uniformed Retirement System was established on July 1, 1974, as a public employee retirement system providing defined benefit pension plan coverage for uniformed or sworn employees of the Fire and Rescue Department, helicopter pilots, the Sheriff's Department, the animal control division, and certain park police officers. In 2005 membership was extended to employees in non-administrative positions of the Department of Public Safety Communications, formerly included in the Fairfax County Employees' Retirement System. There were 1,817 active members, 125 in the Deferred Retirement Option Program (DROP) and 1,194 retirees participating in the System as of June 30, 2014. For calculations surrounding the Total Pension Liability and its components, Cheiron used rollforward techniques with the June 30, 2013, valuation as a starting point. As such, their results were based on the active, DROP, and retiree counts disclosed as of that date.

#### **Provisions**

The benefit provisions of the System are established by County Ordinance. The System provides normal service retirement and early service retirement benefits for members who attain age or service requirements. Coverage for service-connected disability benefits is immediate upon membership in the System. Ordinary (non-service-related) disability benefits are provided after the attainment of five years of service. Members are vested after five years of service and are eligible for benefits at the early or normal service retirement date.

#### **Capital Markets and Economic Conditions**

In fiscal year 2014, the System benefited from strong performance in almost all asset classes. Equity markets were up strongly again in 2014 in the US and internationally as well. Bond markets also performed well, particularly in high-yield bonds, leveraged loans, U.S. credit, and emerging market debt. The System's total portfolio return was positive with a return of 16.5% gross of fees (16.1% after fees and expenses). This return was well above the long term target of



Fairfax County Retirement Systems

10680 Main Street \* Suite 280 \* Fairfax, VA 22030 Phone: 703-279-8200\*1-800-333-1633\*Fax: 703-273-3185 www.fairfaxcounty.gov/retirement/ 7.5% but below the median public fund return of 17.2% and placed in the 59<sup>th</sup> percentile of the BNY Mellon universe of public funds. Investment returns for the five-year period ending June 2014, were 13.3% per year, and placed in the 46<sup>th</sup> percentile.

Additional details on the markets and the System's investments are provided in the Investment Section.

#### **Internal and Budgetary Controls**

The System's management is responsible for the financial information presented in this report in accordance with U.S. generally accepted accounting principles. Proper internal accounting controls exist to provide reasonable, but not absolute, assurance for both the safekeeping of assets and the fair presentation of the financial statements. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management.

#### **Investment Policies and Strategies**

The Board of Trustees has adopted a Statement of Investment Objectives and Policy. This Statement establishes the investment goals, guidelines, constraints and performance standards that the Board of Trustees uses when exercising its fiduciary duties to manage the investment assets of the System. The Board operates in conformity with the standard of care required in making investments as stated in the Code of Virginia §51.1-803.

The Board receives quarterly reporting from their external consulting firm to ensure compliance with its stated objectives and policy. Staff also monitors the performance of the System and its investment managers and updates the Board on a monthly basis throughout the year. Rate of return information is included in the Investment Section, prepared internally by staff using data from the System's investment managers.

Securities of the System, except for the pooled funds and the County's pooled cash and temporary investments, are held in safekeeping, on the System's behalf, by BNY Mellon Asset Servicing as agent. The BNY Mellon Financial Corporation, the parent company, carries Financial Institution bond insurance coverage including a Computer Crime Policy. An additional Excess Securities policy covers all risk of physical loss to securities.

#### **Funded Status**

An actuarial valuation of the System to determine funding requirements is performed annually. The System's funding policy provides for periodic employer contributions at actuarially determined rates which will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the costs of benefit payments when due. The valuation of the System performed as of July 1, 2013, indicated that the ratio of assets accumulated by the System to total actuarial accrued liabilities for benefits showed an increase from 77.3% to 79.1%. The actuarial section contains further information on the results of the July 1, 2013, valuation. For purposes of calculating the net pension liability as of June, 30, 2014, in accordance with Governmental Accounting Standards Board's (GASB) Statement Number 67, the System's funded status was 85.2%.

Based on the July 1, 2013, actuarial valuation, the employer contribution rate for 2015 following the adopted corridor-based funding policy was 34.70%, a decrease of 0.75% from the 2014 rate of 35.45%. This decrease in the rate is based on fiscal year 2013 actuarial experience. During establishment of the fiscal year 2015 County budget, however, the Board of Supervisors adopted a higher contribution rate of 37.90%. This was done to improve the funded level of the plan, accomplished by raising the target unfunded liability amortization level from 91% to 93%, and to fund an increase in service connected disability benefits (discussed further below).

#### **Major Initiatives**

This year's annual report has been revamped and updated to comply with the provisions of GASB Statement Number 67, Financial Reporting for Pension Plans, which specifically regards pension fund financial reporting. Its objective is to improve financial reporting by state and local government pension plans by providing decision-useful information, supporting assessments of accountability and interperiod equity, and creating additional transparency. The significant changes required by GASB 67 are explained in more detail in the Financial Section of this report.

Working in concert with the County's Chief Financial Officer, the System's actuary (Cheiron), and other County staff, efforts continue to improve the funded status of the Plan. As a result of this work, and as referenced above, the County has increased the employer contribution rate above what was required by the adopted corridor-based funding policy for 2014 and 2015. This was accomplished by increasing the target amortization level for the unfunded liability from 90% in prior years to 91% in 2014. This target was further increased to 93% for the County's 2015 adopted budget.

As part of their FY 2013 Carryover actions, the Board of Supervisors directed that staff reduce the Social Security offset for disability related retirements from 25% to 15%, effective January 1, 2014. For those retired prior to December 9, 1996, the benefit level is two-thirds (66 2/3%) of salary. If retired after December 8, 1996, there are two possible levels of benefit. The standard benefit is 40% of salary and a severe service-connected disability benefit is 90% of salary. All three levels of benefits are offset to some extent by Social Security benefits. Prior to this change, there was a 25% offset of disability benefits provided by Social Security.

Finally, on the investment front, the Board approved a 10% investment in the AQR Market Advantage fund, using funds from liquidation of several managers. Also, investments in Victory Capital and Dorset Asset Management were terminated from the current manager lineup.

#### Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to The Fairfax County Uniformed Retirement System for its comprehensive annual financial report for the fiscal year ended June 30, 2013. This was the fourth consecutive year that the government has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current annual financial report continues to meet the Certificate of Achievement Program's

requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

#### Other Information

Independent Audit and Actuarial Certifications

KPMG LLP performed an annual audit of the financial statements of the plan to obtain a reasonable assurance about whether the financial statements are free from material misstatements, whether due from fraud or error. Additionally, Cheiron performed an annual actuarial valuation to assess the plan's ability to meet future obligations. The independent auditors' report and certification from the actuary are included in this report.

#### Acknowledgements

The annual report of the Uniformed Retirement System was prepared by the System's staff under the leadership of the Board of Trustees, whom I have the privilege to serve. I must also acknowledge the entire Retirement System's team for their tireless work throughout the year to ensure we live up to our guiding principles:

- Accountability to the leaders and citizens of Fairfax County
- Accurate and timely **Benefits** for all current and future retirees
- Best-possible Customer Service for all members and retirees

This report is intended to provide complete and reliable information for determining the financial status of the System. It is being submitted to the Board of Supervisors and other interested parties and is available to the public via the County's website located at <a href="https://www.fairfaxcounty.gov/retirement/">www.fairfaxcounty.gov/retirement/</a>.

Respectfully submitted,

Jeffrey K. Weiler Executive Director



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Fairfax County Uniformed Retirement System Virginia

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2013

Executive Director/CEO

Ten members serve on the Fairfax County Uniformed Retirement System. Four of the members are citizens appointed by the Fairfax County Board of Supervisors. Two of the members are elected by Fairfax County Fire and Rescue Department; and two are elected by the Fairfax County Sheriff's Office. The Director of Human Resources and the Director of Finance also serve on as Ex Officio members.

#### **Board of Trustees**

#### Frank H. Grace, III

Chairman
Board of Supervisors Appointee
Term Expires: July 31, 2018

#### Charles E. Formeck

Office of the Sheriff Elected Member Trustee Term Expires: October 31, 2017

#### Richard L. Merrell

Fairfax County Fire & Rescue Department Elected Member Trustee Term Expires: June 30, 2018

#### Susan Woodruff

Fairfax County Director of Human Resources Ex officio Trustee

#### **Christopher J. Pietsch**

Treasurer
Fairfax County Director of Finance
Ex officio Trustee

#### John Niemiec

Fairfax County Fire & Rescue Department Elected Member Trustee Term Expires: June 30, 2016

#### **Thomas Simcoe**

Board of Supervisors Appointee Term Expires: December 31, 2017

#### **Shaughnessy Pierce**

Board of Supervisors Appointee Term Expires: June 30, 2018

#### **Daniel Duncan**

Board of Supervisors Appointee *Term Expires: October 31, 2017* 

#### Hank H. Kim

Vice Chairman
Board of Supervisors Appointee
Term Expires: August 31, 2016

#### **Administrative Organization**

#### **Administrative Staff**

Jeffrey K. Weiler Executive Director

Gregory A. Samay

Chief Investment Officer

Christopher Colandene
Acting Retirement Administrator

Brian Morales
Senior Investment Officer

#### **Professional Services**

Actuary
Cheiron
Actuaries
McLean, VA

Auditor
KPMG LLP
Certified Public Accountants
Washington, DC

#### **Investment Managers**

Acadian Asset Management, LLC Boston, MA

Anchorage Capital Group, LLC New York, NY

Artha Capital Management, Inc. Stamford, CT

Bridgewater Associates, LP Westport, CT

Cohen & Steers Capital Management, Inc.

New York, NY

The Clifton Group Minneapolis, MN

Czech Asset Management, L.P. Old Greenwich, CT

Advisory Research, Inc. Chicago, IL

AQR Investor Services
Greenwich, CT

Ashmore Investment Management Ltd.
New York, NY

BlueCrest Capital Management, LLP New York, NY

Brandywine Global Investment Management, LLC Philadelphia, PA

> Criterion Capital Management San Francisco, CA

Davidson Kempner Institutional Partners, LP New York, NY

### <u>Investment Managers</u> <u>(continued)</u>

DoubleLine Capital, L.P. Los Angeles, CA

FrontPoint Partners, LLC Greenwich, CT

Gramercy Advisors, LLC Greenwich, CT Gresham Investment Management, LLC New York, NY

Harbourvest Partners, LLC Boston, MA

JP Morgan Investment Management, Inc. New York, NY

King Street Capital Management, L.P. New York, NY Marathon Asset Management, LLP London, UK

OrbiMed Healthcare Fund Management New York, NY Pantheon Ventures, Inc. San Francisco, CA

PIMCO Newport Beach, CA Starboard Value, L. P. New York, NY

Standish Mellon Asset Management Pittsburgh, PA

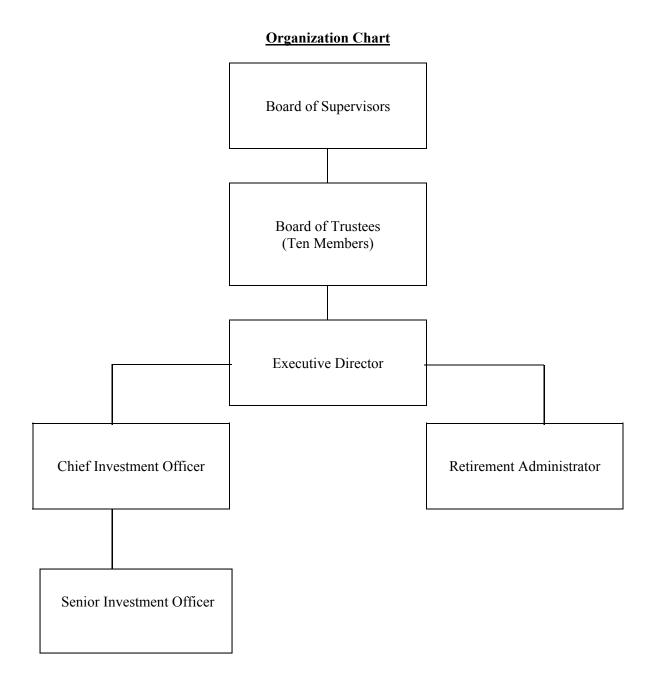
UBS Realty Investors, LLC Hartford, CT

Wellington Management Company, LLP Boston, MA

#### **Investment Consultant**

#### **Custodian Bank**

NEPC Boston, MA BNY Mellon Asset Servicing Pittsburgh, PA



#### **Summary of Plan Provisions**

Membership in the Fairfax County Uniformed Retirement System includes most uniformed or sworn employees of the Fire and Rescue Department, the Sheriff's Department, the Animal Control Division, the Department of Public Safety Communications, helicopter pilots, and former park police officers who elected to remain in the System rather than transfer to the Police Officers Retirement System. The System consists of five Options, Option A, Option B, Option C, Option D and Option E, which have different employee contribution rates and different benefits. Members hired after, April 1, 1997, and before January 1, 2013, are enrolled in Option D. Members hired on or after January 1, 2013, are members of Option E.

The general provisions of the Uniformed Retirement System follow:

#### **Normal Retirement:**

Normal retirement is either age 55 with at least 6 years of service or any age with 25 years of service including sick leave. Option E members have a cap of 2,080 hours of sick leave that will count towards retirement service credit.

#### **Deferred Retirement Option Program (DROP):**

Those eligible for normal retirement may enter DROP for up to three years. While participating in DROP, the member continues to work and receive a salary. In lieu of continuing to earn service credit, DROP participants accumulate a lump sum, including interest, payable at retirement. Option E members who enter DROP may use a maximum of 2,080 hours of sick leave towards retirement service credit and are not paid a Pre-Social Security benefit while in DROP.

#### **Early Retirement:**

A member is eligible for early retirement upon attaining 20 years of service. Reduction factors are applied to the basic formula.

#### **Deferred Vested Retirement:**

Deferred vested retirement is available for vested members who leave their contributions in the System when they terminate. Vesting occurs at 5 years of creditable service. At age 55, these members are entitled to their normal retirement benefit based on County service.

#### **Service-Connected Disability Retirement:**

Service-connected disability retirement is available for members, regardless of length of service, who become disabled as a result of a job-related illness or injury. The benefit is 40% of final compensation less workers' compensation and 15% of the Social Security disability benefit. The benefit for members retired on a severe service-connected disability is calculated at 90% of salary at the time of retirement less the workers' compensation benefit and 15% of any Social Security benefit.

#### **Ordinary Disability Retirement:**

Ordinary disability retirement is available for vested members who become disabled due to an injury or illness that is not job-related. Normal retirement benefits are paid.

# **Summary of Plan Provisions** (continued)

#### **Death Benefits:**

If death occurs prior to retirement: If the member is vested and the spouse is the listed beneficiary, the spouse may elect to receive 50% of the normal retirement benefit earned as of the date of the member's death. If the 50% of normal retirement benefit is not payable, a refund of the member's contribution plus interest will be paid to the named beneficiary or member's estate.

If death occurs after retirement: Refunds of any of the member's contributions and interest not already paid out in benefits will be paid to the named beneficiary(ies) unless the member elected the irrevocable Joint and Last Survivor Option which provides a benefit to the member's spouse for life. At retirement, the member may choose to have his or her spouse receive 50%, 66%, 75%, or 100% of the member's reduced annuity upon the member's death. The member's annuity is reduced by a percentage based on the difference in age between the member and his or her spouse. If the spouse pre-deceases the member, the annuity is restored to what it would have been if this option had not been elected.

If death is service-connected: A \$10,000 lump-sum payment is made to the beneficiary if the member's death is due to a job-related illness or injury.

#### **Normal Retirement Benefit:**

Options A and B – 2.0% of average final compensation (AFC) (highest consecutive three years) multiplied by the number of years of creditable service; and it is then increased by 3%.

A **supplemental benefit** is payable up to age 62. The amount of the supplemental benefit is based on the primary Social Security benefit the member would have been entitled to if the member were 65 on the date of retirement. For members hired on or after July 1, 1976, this basic amount is equal to a percentage of the Social Security benefit. That percentage is determined by dividing the member's creditable service by 25. The exact amount of this benefit also depends on the member's age and Plan (see below). The benefit is then increased by 3%.

**Option A Pre-62 Supplemental Benefit** – If the member is less than age 55, no supplemental benefit is payable. From age 55 to 62, the full basic amount of the supplement is payable. After age 62, the benefit payable is any excess of the full basic amount which exceeds the member's actual earliest Social Security benefit payable.

**Option B Pre-62 Supplemental Benefit** – If the member is less than age 55, one-half of the basic amount of the supplemental benefit is payable. From age 55 to 62, the full basic amount of the supplement is payable. After age 62, the benefit payable is any excess of the full basic amount which exceeds the member's actual earliest Social Security benefit payable.

In addition, a **Pre-Social Security Supplement** is payable to members of Options A & B until the first month after the member attains the age of eligibility for unreduced Social Security retirement benefits. The amount of the Pre-Social Security Supplement is 0.2% of AFC multiplied by the number of years of creditable service, increased by 3%.

# Summary of Plan Provisions (continued)

Options C, D and E -2.5% of average final compensation (highest consecutive three years) multiplied by the number of years of creditable service; and it is then increased by 3%. No Pre-62 Supplemental Benefits are payable under Options C, D or E.

In addition, a **Pre-Social Security Supplement** is payable to members of Options C, D & E until the first month after the member attains the age of eligibility for unreduced Social Security retirement benefits. The amount of the Pre-Social Security Supplement is 0.3% of AFC multiplied by the number of years of creditable service, increased by 3%.

#### **Cost of Living Benefit:**

Annual cost-of-living adjustments (COLAs) are provided to retirees and beneficiaries equal to the lesser of 4% or the percentage increase in the Consumer Price Index for the Metropolitan Statistical Area that includes Fairfax County. Members of Option A and C receive COLA increases beginning at age 55. Members of Option B and D receive COLAs beginning at retirement. COLAs are not applied to the Pre-Social Security Supplements.

#### **Benefit Limits:**

Benefits are limited to the maximum amounts for qualified plans as set forth in Section 415 of the Internal Revenue Code. A separate nonqualified benefit restoration plan has been established for the payment of any benefit formula amounts in excess of the Section 415 limit.

#### **Contribution Rates:**

#### **Members:**

**Option A:** 4% of base salary up to the maximum Social Security wage base plus 5.75% of base salary over the wage base.

**Option B:** 7.08% of base salary up to the maximum Social Security wage base plus 8.83% of base salary over the wage base.

**Option C:** 4% of creditable compensation.

**Options D and E:** 7.08% of creditable compensation.

**Employer:** The rate for Fiscal Year 2014 was 36.43% of covered payroll for all Options.

<u>Note:</u> Detailed provisions may be found in the Retirement Handbook for Active Employees: http://www.fairfaxcounty.gov/retirement/active\_uniformed/publications.htm



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

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

The Board of Supervisors County of Fairfax, Virginia

The Board of Trustees
Fairfax County Uniformed Retirement System:

We have audited the accompanying financial statements of the Fairfax County Uniformed Retirement System (the System), a pension trust fund of the County of Fairfax, Virginia as of and for the year ended June 30, 2014, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

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

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

#### Auditor's 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 auditor's 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.

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

.



The Board of Supervisors County of Fairfax, Virginia

The Board of Trustees Fairfax County Uniformed Retirement System Fairfax County, VA

December 5, 2014 Page 2 of 3

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

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2014, and the changes in fiduciary net position for the year then ended in accordance with U.S. generally accepted accounting principles.

#### **Emphasis of Matter**

As discussed in Note 1 to the financial statements, in fiscal year 2014, the System implemented the Governmental Accounting Standards Board Statement No. 67, *Financial Reporting for Pension Plans*. Our opinion is not modified with respect to this matter.

#### Other Matters

#### Required Supplementary Information

U.S. generally accepted accounting principles require that management's discussion and analysis on pages 16-18, the schedule of changes in the net pension liability and related ratios on page 34, the schedule of net pension liability on page 35, the schedule of employer contributions on page 36, and the schedule of money weighted rate of return on page 36 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.



The Board of Supervisors County of Fairfax, Virginia

The Board of Trustees Fairfax County Uniformed Retirement System Fairfax County, VA

December 5, 2014 Page 3 of 3

Supplemental 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 1-12, the additional supplementary information on pages 37, the investment section on pages 39-50, the actuarial section on pages 51-71 and the statistical section on pages 73-75 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The additional supplementary information is the responsibility of management and was derived from and relates 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 additional 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.



Washington, DC December 5, 2014

# **Management's Discussion and Analysis (unaudited)**

This section presents management's discussion and analysis of the Fairfax County Uniformed Retirement System's ("System" or "Plan") financial performance and provides an overview of the financial activities for the fiscal year ended June 30, 2014. The information in this section should be reviewed in conjunction with the letter of transmittal provided at the beginning of this report.

#### Overview of Financial Statements and Accompanying Information

**Basic Financial Statements.** The System presents the Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position as of June 30, 2014. These statements reflect the resources available for the payment of benefits as of year-end and the sources and uses of these funds during the year.

**Notes to Financial Statements.** The Notes to Financial Statements are an integral part of the financial statements and include additional information and schedules to provide a better understanding of the financial statements. The Notes to Financial Statements immediately follow the basic financial statements.

**Required Supplementary Information.** The Required Supplementary Information include the schedule of changes in net pension liability, schedule of net pension liability, schedule of contribution and the money-weighted rate of investment returns. Additional Supplementary Information for the administrative expenses and the investment and consultant expenses are added. The Required Supplementary Information and Additional Supplementary notes are immediately following the Notes to Financial Statements.

#### **Financial Analysis**

**Plan Net Position.** For fiscal year 2014, the net position of the Uniformed Retirement System increased 15.0% resulting in a total net position value of \$1.52 billion, reflecting an increase of \$197.9 million from fiscal year 2013. The growth in net position was primarily due to current year's investment income of \$210.3 million and contributions significantly exceeding benefit payments and expenses. The following table details the Uniformed System's net position for the current and prior fiscal years:

	Ending Balances	Net Change in	
Fiscal Year	(millions)	<b>Dollars</b> (millions)	Net Change in Percent
2013	\$1,318.8	\$109.9	9.1
2014	\$1,516.7	\$197.9	15.0

Investment returns were higher for fiscal year 2014 reflecting higher returns in the capital markets. The total fiduciary assets as of June 30, 2014, were \$1.59 billion, representing an increase of \$175.9 million, or 12.4%, over the previous fiscal year. The main component of the increase were due primarily to the strong market conditions that resulted to a total investment of \$1.38 billion in fiscal year 2014 as compared to \$1.18 billion in fiscal year 2013.

The actuarial value of the assets as of the last valuation on July 1, 2013, was \$1.33 billion while actuarial liabilities as of the same period were \$1.68 billion. For purposes of funding, this resulted in a funded ratio of 79.1%. However, for purposes of GASB 67, the Total Pension

Liability (TPL) as of July 1, 2013, was \$1.70 billion compared to the Total Net Position of \$1.32 billion, which results in a funding ratio of 77.8%.

The Plan's investments are exposed to various risks including interest rate, market, and credit risks. These risks may be influenced by changes in economic conditions and market conditions. Therefore, it is reasonable to assume that there will be changes in the values of the investments held in trust which could materially affect the amounts reported in the financial statements. Detailed information on investment results are in the Investment Section of this report.

**Additions and Deductions.** The employer contributions for fiscal year 2014 increased by 4.4% due to an increase in the employer contribution rate from 35.00% to 36.43% of salary. The total contributions for the fiscal year ended June 30, 2014, amounted to \$67 million. The plan member's contribution decreased by 0.29% as a result of the lower number of active employees from 1862 in fiscal year 2013 to 1817 in fiscal year 2014 and the retirement of higher salaried employees.

Deductions to the retirement system consist of the payments of benefits to retirees and beneficiaries, the refund of contributions to former members, and the cost of administering the retirement system. Deductions increased 5.6% primarily because of the 6% increase in benefit payments while the refunds decreased by 28.4% compared to last year. Benefit payments increased due to a cost-of-living increase of 1.4%, an increase in the number of retirees and higher benefits for new retirees. Refunds of contributions decreased as a result of fewer employee turnover.

#### **Summary Schedule of Plan Fiduciary Net Position**

Assets	2014	2013	Difference
Total cash and investments	\$1,534,359,389	\$1,333,798,953	\$200,560,436
Total fixed assets	816	1,088	(272)
Total receivables	<u>56,705,621</u>	81,341,484	(24,635,863)
Total assets	1,591,065,826	1,415,141,525	175,924,301
Total liabilities	74,345,781	96,327,524	(21,981,743)
Net position restricted for pension	<u>\$1,516,720,045</u>	<u>\$1,318,814,001</u>	<u>\$197,906,044</u>

#### **Summary Schedule of Additions and Deductions**

Additions	2014	2013	Difference
Contributions			
Employer	\$56,094,690	\$53,722,160	\$2,372,530
Plan Members	10,905,744	10,937,857	(32,113)
Total investment income	210,256,032	120,417,604	89,838,428
<b>Total Additions</b>	277,256,466	185,077,621	92,178,845
Deductions			
Benefit payments	78,358,943	73,914,711	4,444,232
Refunds	557,938	779,395	(221,457)
Administrative expense	433,541	434,117	<u>(576)</u>
<b>Total deductions</b>	79,350,422	75,128,223	4,222,199
Net increase/(decrease)	<u>\$197,906,044</u>	<u>\$109,949,398</u>	<u>\$87,956,646</u>

#### **Contacting the System's Financial Management**

This financial report is designed to provide our membership, the Board of Trustees and the County's Board of Supervisors with a general overview of the System's financial condition. If you have any questions about this report or need additional information, contact the Fairfax County Retirement Administration Agency, 10680 Main Street, Suite 280, Fairfax, Virginia 22030. This report can also be found on the County's internet site at www.fairfaxcounty.gov/retirement/.

## **Statement of Fiduciary Net Position**

As of June 30, 2014

A	~~~	4~
А	sse	TS

Cash and short-term investments		
Equity in County's pooled cash and temporary	Φ1 0 10 100	
investments	\$1,940,100	
Cash collateral received for securities on loan	8,587,339	
Short-term investments	<u>143,415,635</u>	
Total cash and short-term investments		\$153,943,074
Fixed Assets		
Equipment, net	<u>816</u>	
Total fixed assets		816
Receivables		
Accounts receivable	2,958,116	
Accrued interest and dividends	2,555,653	
Investment proceeds and other receivables	<u>51,191,852</u>	
Total receivables		56,705,621
Investments, at fair value		
Common and preferred stock	238,208,622	
Fixed income		
Asset-backed securities	100,295,618	
Corporate and other bonds	97,823,059	
U.S. Government obligations	34,167,802	
Pooled and mutual funds	909,921,214	
Total investments		<u>1,380,416,315</u>
Total assets		1,591,065,826
Liabilities		
Investment purchases and other liabilities	(63,109,492)	
Cash collateral received for securities on loan	(8,587,339)	
Accounts payable and accrued expenses	(2,648,950)	
Total liabilities		(74,345,781)

## Net position restricted for pensions

\$1,516,720,045

See accompanying notes to financial statements.

#### **Statement of Changes in Fiduciary Net Position**

For the Year Ended June 30, 2014

•					
Λ	П	n	tı	or	ıc
$\boldsymbol{\Gamma}$	u	uı	u	VΙ	IJ

$\sim$		. •	
Con	truk	<b>\11f1</b> /	anc
COII	ши	Juu	oms

Employer	\$56,094,690
Plan members	10,905,744

Total contributions \$67,000,434

Investment income

Net appreciation in fair value of investments 191,207,399
Interest and other investment income 14,012,306
Dividends 10,272,199
Total investment income 215,491,904

Investment activity expense

Management fees (4,955,562)
Custodial fees (69,244)
Consulting fees (189,025)
Allocated administration expense (201,112)
Total investment expense (5,414,943)

Net income/(loss) from investment activities 210,076,961

From securities lending activities

Securities lending income 261,717
Securities lending expenses (82,646)

Net income from securities lending activities 179,071

Total net investment income/(loss)  $\underline{210,256,032}$ 

Total additions 277,256,466

**Deductions** 

Annuity benefits 69,212,758
Disability benefits 8,164,393
Survivor benefits 981,792
Refunds of employee contributions 557,938
Administrative expense 433,541

Total deductions <u>79,350,422</u>

Net increase 197,906,044

Net position restricted for pensions

Beginning of fiscal year 1,318,814,001 **End of fiscal year** \$1,516,720,045

See accompanying notes to financial statements.

#### **Notes to the Financial Statements**

As of and for the year ended June 30, 2014

The Fairfax County Uniformed Retirement "System" is a single-employer defined benefit pension plan considered part of the County of Fairfax, Virginia's ("County") reporting entity and its financial statements are included in the County's basic financial statements as a pension trust fund.

#### A. Summary of Significant Accounting Policies

Basis of Accounting. The System's basic 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 and employer contributions to the plan are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due in accordance with the terms of the plan. The cost of administering the plan is paid by the System.

Method Used to Value Investments. Short-term investments are reported at cost, which approximates fair value. All other investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Asset-backed securities are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. Because of the inherent uncertainty in valuing these securities, the fair value may differ from the values that would have been used had a ready market for such securities existed. Accordingly, the realized value received upon the sale of the assets may differ from the fair value. The System records investment purchases and sales as of trade date. These transactions are not finalized until the settlement date, which occurs approximately three business days after the trade date. The amounts of trade receivables and payables are shown as receivables and payables on the Statements of Fiduciary Net Position. Cash received as collateral on securities lending transactions and investments made with such cash are reported as assets along with a related liability for collateral received. The market values of private investments and direct real estate are lagged by one quarter due to the timing of receipt of private market valuations and information.

Equity in County's Pooled Cash and Temporary Investments. The System maintains 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. As of June 30, 2014, 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. The County's investments are exposed to various risks such as interest rate risk, 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 at least reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the financial statements.

Implementation of New Accounting Pronouncements. In fiscal year 2014, the System implemented GASB Statement No. 65, Items Previously Reported as Assets and Liabilities, issued in March 2012. This statement establishes accounting and financial standards that reclassifies certain items that were previously reported as assets and liabilities as deferred outflows of resources, deferred inflows of resources, or current period outflows and inflows.

Upon careful review, it has been established that the System does not have any applicable reporting changes.

In fiscal year 2014, the System implemented GASB Statement No. 67, Financial Reporting for Pension Plan (GASB 67), issued in June 2012. The System adopted the GASB 67 during the fiscal year ended June 30, 2014, which addresses the accounting and financial reporting requirements for pension plans. The requirements for GASB No. 67 require changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures.

#### B. Plan Description, Deferred Retirement Option Program, Contributions and Deductions

Plan Description. The System is a single-employer defined benefit pension plan. The Plan covers uniformed employees including non-clerical employees of the Fire and Rescue Department, Office of the Sheriff, helicopter pilots, public safety communications personnel, animal wardens, and game wardens who are not covered by other plans of the County or the Virginia Retirement System. Benefit provisions are established and may be amended by County ordinance. All benefits vest at five years of service. To be eligible for normal retirement, an individual must meet the following criteria: (a) attain the age of 55 with six years of service, or (b) complete 25 years of service. The normal retirement benefit is calculated using average final compensation (i.e., the highest consecutive three years) and years (or partial years) of service at date of termination. The Plan provides that unused sick leave credit may be used in the calculation of average final compensation by projecting the final salary during the unused sick leave period. Those who commenced employment on or after January 1, 2013, may not use more than 2,080 hours of accrued sick leave toward service credit for retirement or deferred retirement option program (DROP) entry. Unused sick leave is also used to increase years of service for calculating benefits and determining retirement eligibility.

Annual cost-of-living adjustments are provided to retirees and beneficiaries equal to the lesser of 4.0% or the percentage increase in the Consumer Price Index for the Washington Consolidated Metropolitan Statistical Area.

*Board of Trustees.* Ten members serve on the Fairfax County Uniformed Retirement System. Four of the members are citizens appointed by the Fairfax County Board of Supervisors. Two of the members are elected by Fairfax County Fire and Rescue Department; and two are elected by the Fairfax County Sheriff's Office. The Director of Human Resources and the Director of Finance also serve as Ex Officio members.

*Membership.* At July 1, 2013, the date of the latest actuarial valuation, membership in the System consisted of:

Retirees and beneficiaries receiving benefits	1,155
Terminated plan members entitled to but not yet receiving benefits	47
Deferred Retirement Option Program (DROP) participants	126
Active plan members	<u>1,862</u>
Total	3,190

Deferred Retirement Option Program. Members eligible for normal retirement may elect to enter Deferred Retirement Option Program (DROP.) As a DROP member, he or she will continue to work and receive a salary for a maximum period of three years while an amount equal to what could have been received as a retirement benefit is credited to his or her DROP account (no pre-Social Security Supplements are paid into DROP accounts for Option E). The monthly benefit that will be credited to the DROP account is determined by the years of service and Average Final Compensation at the DROP entry date. During the DROP period, the retirement plan accumulates his or her accrued monthly benefit which is payable at the end of the DROP period. The DROP account balance is credited at an annual interest rate of 5%, compounded monthly. At the end of the DROP period, the DROP member must terminate employment with the Fairfax County Government and will begin receiving his or her monthly retirement benefit. Upon DROP exit, the retiree can elect to receive the balance of the DROP account in the form of a lump sum distribution, a rollover to another qualified plan (or IRA), or as an addition to the monthly retirement annuity. The DROP balance as of June 30, 2014, was \$15,654,551.

Contributions. The contribution requirements of the System's members are established and may be amended by County ordinances. Option A members were given the opportunity to join Option B as of July 1, 1981, and to enroll in Option C as of April 1, 1997. From July 1, 1981, until March 31, 1997, all new hires were enrolled in Option B. Option B members were given the opportunity to enroll in Option D as of April 1, 1997. From April 1, 1997, through December 31, 2012, all new hires were enrolled in Option D. All eligible employees whose County employment commenced by reporting to work on or after January 1, 2013, are automatically enrolled in Option E. Option A requires member contributions of 4.0 percent up to the Social Security wage base and 5.75 percent of compensation in excess of the wage base. Option B requires member contributions of 7.08 percent of compensation up to the Social Security wage base and 8.83 percent of compensation in excess of the wage base. Option C requires member contributions of 4.0 percent of compensation. Options D and E require contributions of 7.08 percent of compensation. The County is required to contribute at an actuarially determined rate; the rate for the year ended June 30, 2014, was determined actuarially to be 35.45% of annual covered payroll. The decision was made to commit additional funding and a rate of 36.43% was adopted for fiscal year 2014.

*Deductions*. The deductions from the System include the payment of retiree and beneficiary payments, the refund of employee contributions to former members and administrative expenses.

#### C. Investments

Investment Policy. The authority to establish the System is set forth in Section 51.1-800 Code of Virginia (Code). Section 51.1-803 of the Code authorizes fiduciaries of the System to purchase investments with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with the same aims. The Board shall also diversify such investments as to minimize the risk of large losses unless under the circumstances it is clearly prudent not to do so. While the System is not subject to the provisions of the Employee Retirement Income Security Act (ERISA), the Board of Trustees endeavors to comply with the spirit of ERISA to the extent that it does not conflict with the Code of Virginia.

The System has adopted a Statement of Investment Objectives and Policies whose general investment philosophy is to maintain a well-diversified, high-quality investment program that can meet the long-term needs of the members of the System. The Board of Trustees believes that the retention of experienced money management professionals with proven investment disciplines is the best means of attaining the System's investment goals and that the investment program should

be sufficiently flexible to adapt to changes in the financial markets. Investment decisions for these assets are made by the Board of Trustees or investment managers selected by the Board. The overall investment policies do not address specific levels of credit risk, interest rate risk or foreign currency risk. Each individual investment portfolio is managed by an investment management firm selected by the Board. Each investment portfolio has a specific benchmark and investment guidelines. While the overall investment guidelines do not specifically address concentration of credit risk, managers have specific quality and concentration limits appropriate for the type of mandate they are managing and that fit within the total risk tolerance of the fund.

The following was the System's adopted asset allocation policy as of June 30, 2014. Our asset allocation policy commonly exceeds 100% because we monitor the target exposures to both direct investments in asset classes plus notional exposure to asset classes through derivative positions such as Futures held at the portfolio level. We also commonly include notional exposures for select Investment Managers that have a mandate from the Board to provide the System with additional asset class exposure using leverage or derivatives.

Asset Class	<b>Target Exposure</b>
U.S. Equities	13.00%
International Equities	14.00%
Private Equities	3.00%
Fixed Income	25.00%
Real Estate	8.00%
Alternatives	22.00%
Risk Parity	20.00%

Concentrations. The System does not have investments (other than U.S. Government and U.S. Government guaranteed obligations) in any one issuer that represents 5 percent or more of net position available for benefits. All investments, except for the pooled and mutual funds, short-term investment fund, and a short-term collateral investment pool are held by an unaffiliated custodian. There is no custodial credit risk since the custodian's records establish the System's interest in the securities.

The System's fixed income portfolio shall be, on average, comprised of high-quality issues and limits are imposed on investment managers' below-investment-grade holdings. Unless otherwise specified, if any security has a split rating, the higher of the two ratings is used for the purposes of meeting minimum quality standards.

Rate of Return. For the year ended June 30, 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 16.1 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The System's investment quality ratings at June 30, 2014, were as follows:

Type of Investment	<u>Fair Value</u>	<b>Ratings</b>	Percent of Fixed
U. S. Government obligations	\$34,167,802	AA	14.7%
Corporate & other bonds	5,801,298	AAA	2.5%
	17,826,260	AA	7.7%
	29,552,824	A	12.7%
	13,148,659	BBB	5.7%
	5,526,419	BB	2.4%
	317,812	В	0.1%
	25,649,787	Unrated	11.0%
Asset-backed securities	1,103,419	AAA	0.5%
	39,026,046	AA	16.8%
	1,146,724	A	0.5%
	2,764,692	BBB	1.2%
	1,524,190	BB	0.6%
	1,621,519	В	0.7%
	10,107,337	CCC	4.4%
	1,095,544	CC	0.5%
	13,458,238	D	5.8%
	28,447,909	Unrated	12.2%
Total fixed income	<u>\$232,286,479</u>		100.00%
Short-term investments	\$7,206,052	AA	
	136,209,583	Unrated	
	<u>\$143,415,635</u>		

As of June 30, 2014, the fixed income portfolio, excluding pooled funds consisted of 62.3% invested in investment grade securities, 14.5% invested in below-investment-grade securities and 23.2% invested in unrated securities.

The Barclays Capital Aggregate Bond Index (BCAG) is the standard benchmark against which the industry and the System's Board measures its fixed income portfolio performance and volatility. The System's fixed income managers have discretion, within circumscribed limits, to extend the duration of their portfolios beyond that of the BCAG if they forecast falling interest rates (and thus higher bond prices). Conversely, if managers anticipate that the general level of interest rates will rise, they have the ability to shorten the duration of their portfolio and thus reduce the portfolio's sensitivity to rising rates.

The System's investments' sensitivity to interest rates at June 30, 2014, follows:

		Option - Adjusted	Percentage of
<b>Investment Type</b>	<b>Fair Value</b>	<b>Durations (yrs)</b>	<b>Fixed</b>
U.S. Government obligations	\$34,167,802	7.5	14.7%
Corporate and other bonds	97,823,059	6.0	42.1%
Asset-backed securities	100,295,618	<u>4.2</u>	<u>43.2%</u>
Total fixed income	<u>\$232,286,479</u>	5.5	100.0%
Short-term investments	<u>\$143,415,635</u>	0.2	

As of June 30, 2014, the System's overall fixed income portfolio duration was 5.5 years. The duration of the BCAG was 5.5 years.

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of the investment. The System's investments at June 30, 2014, held in currencies other than U.S. dollars were as follows:

	Short Term Investments &	Convertible and Fixed		
<b>International Securities</b>	<b>Other</b>	<b>Income</b>	<b>Equity</b>	<b>Total</b>
Euro Currency Unit	\$1,306,020	\$13,165,270	\$34,132,927	\$48,604,217
Pound Sterling	938,472	4,820,738	41,414,353	47,173,563
Japanese Yen	1,312,499	(29,699)	42,444,626	43,727,426
Australian Dollar	4,389	8,165,627	5,880,990	14,051,006
Mexican New Peso	15,658	12,025,956		12,041,614
Danish Krone			8,011,067	8,011,067
Swiss Franc	8,410		7,268,230	7,276,640
Hong Kong Dollar	5,885		6,374,861	6,380,746
South Korean Won		3,502,467	2,085,898	5,588,365
Swedish Krona			4,968,177	4,968,177
Brazil Real	9,657	3,866,857		3,876,514
Polish Zloty	10,456	3,632,382		3,642,838
Hungarian Forint		3,074,008		3,074,008
S African Comm Rand		2,722,849		2,722,849
New Zealand Dollar	3,350	2,457,621	203,561	2,664,532
Singapore Dollar	4,685		2,210,820	2,215,505
Norwegian Krone			1,873,006	1,873,006
Indonesian Rupiah		1,764,755	22,586	1,787,341
Malaysian Ringgit		1,619,440	129,075	1,748,515
New Turkish Lira		1,117,787		1,117,787
Other Currencies	<u>22,018</u>		<u>1,813,414</u>	1,835,432
Total International	<u>\$3,641,499</u>	<u>\$61,906,058</u>	<u>\$158,833,591</u>	<u>\$224,381,148</u>

Derivative Financial Instruments. In accordance with the Board's investment policies, the System regularly invests in derivative financial instruments with off-balance-sheet risk in the normal course of its investing activities to enhance return on investment and manage exposure to certain risks within the fund. The System also enters into derivative transactions to gain exposure to currencies and markets where derivatives are the most cost-effective instrument. Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates or financial indices. During fiscal year 2014, the System invested directly in various derivatives including asset-backed securities, collateralized mortgage obligations, exchange-traded futures contracts, forward currency contracts, options, swaps, and floating rate securities. Some securities, such as structured notes, can have derivative-like characteristics where the return may be linked to one or more indexes. Others such as asset-backed securities like collateralized mortgage obligations (CMOs) are sensitive to changes in interest rates and prepayments. It should also be noted that the System also has exposure to derivatives indirectly through its ownership interests in certain hedge funds, mutual funds and commingled funds which may use, hold, or write derivative financial instruments.

Derivative investments may involve, to varying degrees, elements of credit and market risk in excess of amounts recognized on the financial statements. Market risk results from fluctuations in interest rates, and currency rates. The credit risk of these investments is associated with the creditworthiness of the related parties to the contracts. The System could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. Holders of futures contracts look to the exchange for performance under the contract and not to the other party holding the offsetting futures position. Accordingly, the amount at risk due to nonperformance of counterparties to futures contracts is minimal. For counterparties involving over the counter derivatives, the Board seeks to control this risk through counterparty credit evaluations, counterparty credit limits, and exposure monitoring procedures conducted by investment managers and staff. To address counterparty risk, the System instructs our investment managers who use swaps, forwards, and options to only enter into contracts with counterparties rated at investment grade of BBB or better by at least one nationally recognized rating agency.

At June 30, 2014, the System held all four types of derivative financial instruments: futures, currency forwards, options and swaps. Futures, currency forwards, options, and swaps contracts provide the System with the opportunity to build passive benchmark positions, manage portfolio duration in relation to various benchmarks, adjust portfolio yield curve exposure, enhance returns, and gain market exposure to various indices in a more efficient way and at lower transaction costs. Credit risks depend on whether the contracts are exchange-traded or exercised over-the-counter. Market risks arise from adverse changes in market prices, interest rates, and foreign exchange rates.

Investment managers are prohibited from purchasing securities on margin or using leverage unless specifically permitted within the investment manager's guidelines. Derivative instruments covered under the scope of GASB 53 are reported at fair value. The changes in fair value of derivative instruments that are used for investment purposes are reported within the investment revenue classification. Gains and losses on derivative securities are determined based upon fair market values as determined by our custodian and recorded in the Statement of Changes in Fiduciary Net Position.

Futures. Futures contracts are contracts to deliver or receive securities at a specified future date and at a specified price or yield. Futures contracts are traded on organized exchanges (exchange-traded) and typically require an initial margin (collateral) in the form of cash or marketable securities. The net change in the futures contract value is settled daily, in cash, with the exchanges. The net gains or losses resulting from the daily settlements are included in the System's financial statements. Holders of futures contracts look to the exchange for performance under the contract and not to the entity holding the offsetting futures position. Accordingly, the amount at risk posed by nonperformance of counterparties to futures contracts is minimal. The notional value of the System's investment in futures contracts at June 30, 2014, is as follows.

Types of Futures	<b>Base Exposure</b>	<b>Notional Cost</b>
Cash and cash equivalents futures		
Long	\$49,617,008	\$49,261,765
Equity futures		
Long	156,289,620	153,951,802
Fixed income futures		
Long	6,172,461	6,187,018
Short	(339,188)	(335,109)
Grand Total	<u>\$211,739,901</u>	<u>\$209,065,476</u>

Swaps. The System enters into several types of swap contracts, in which two counterparties agree to exchange one stream of payments for another over some agreed to period of time. Swaps are used to manage risk and enhance returns. All counterparties are rated A or better. The following is information on the System's swap contracts outstanding at June 30, 2014.

	Base Exposure	Market Value
Fixed Income Swaps:		
Interest Rate Swaps	(\$133,905)	(\$125,312)

Currency Forwards. Currency forwards represent foreign exchange contracts and are used to effect settlements and to protect the base currency value of portfolio assets denominated in foreign currencies against fluctuations in the exchange rates of those currencies or to gain exposure to the change in market value of a specific currency. A forward foreign currency exchange contract is a commitment to purchase or sell a foreign currency at a future date and at a negotiated price. The credit risk of currency contracts that are exchange-traded lies with the clearinghouse of the exchange where the contracts are traded. The credit risk of currency contracts traded over-the counter lies with the counterparty, and exposure usually is equal to the unrealized profit on in-the money contracts. All counterparties are rated A or better. The market risk in foreign currency contracts is related to adverse movements in currency exchange rates. The following is summary information on the System's currency forwards contracts at June 30, 2014.

(52,258)

668

2,156 (\$24,306)

	Notional	T
Foreign Currency Contracts Purchased	(Local Currency)	Unrealized Gain/(Loss) (\$US)
Australian Dollar	(4,220,000)	(\$58,572)
Brazil Real	(420,377)	(2,237)
Euro Currency Unit	(11,493,000)	45,705
Japanese Yen	(8,593,000)	(212)
New Zealand Dollar	(2,720,000)	(22,065)
Polish Zloty	(9,920,000)	(9,952)
Pound Sterling	(149,000)	(4,524)
		(\$51,857)
	Notional	
Foreign Currency Contracts Sold	(Local Currency)	Unrealized Gain/(Loss) (\$US)
Brazil Real	280,251	\$931
Chilean Peso	1,798,100,000	2,687
Euro Currency Unit	2,229,000	21,510

226,000,000

17,186,000

2,440,652

Net Unrealized Gain (Loss) on Foreign Currency Spot and Forward Contracts (\$76,163)

Options. Option contracts may be exchanged traded or negotiated directly in over the counter transactions between two counterparties. Options holders have the right, but not the obligation, to purchase (call) or sell (put) a financial instrument at a future price and time. The System can both purchase and write options. Exchange traded options rely on the exchange for performance and the risk to non-performance of counterparties is minimal. All counterparties for over the counter options are rated A or better. The following table provides information on the System's option contracts at June 30, 2014.

					Unrealized Investment
Option Type	<b>Position</b>	Call/Put	Cost	Market Value	Gain/(Loss) Base
Cash & Cash Equivalents	Written	Call	(\$16,800)	(\$10,417)	\$6,383
		Put	(15,386)	(8,217)	<u>7,169</u>
Total			(\$32.186)	<u>(\$18.634)</u>	<b>\$13.552</b>

Indian Rupee

Japanese Yen

Mexican New Peso

Securities Lending. The Board of Trustees' policies permit the System to lend its securities to broker-dealers and other entities (borrowers) for collateral that will be returned for the same securities in the future. The System's custodian is the agent in lending the plan's domestic securities for collateral of 102% and international securities of 105%. The custodian receives cash or securities as collateral from the borrower. All securities loans can be terminated on demand by either the System or the borrower. Securities received as collateral are not reported as assets and liabilities on balance sheet since the Retirement Administration Agency does not have the ability to pledge or sell the collateral securities absent borrower default.

The following represents the balances relating to the securities lending transactions at June 30, 2014.

	Underlying	Cash Collateral	Securities Collateral
Securities Lent	<b>Securities</b>	<b>Investment Value</b>	<b>Investment Value</b>
Lent for cash collateral			
US Government securities	\$423,604	\$432,470	
Corporate and other bonds	727,314	764,451	
Common and preferred stock Lent for securities collateral	7,136,579	7,390,418	
US Government securities	7,062,991		\$7,296,717
Corporate and other bonds	4,476,241		4,588,147
Common and preferred stock	59,553,817		66,082,647
Total	<u>\$79,380,546</u>	<u>\$8,587,339</u>	<u>\$77,967,511</u>

The System did not impose any restrictions during fiscal year 2014 on the amounts of loans the lending agent made on its behalf. At year end, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System. The custodian provides 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 income earned on the securities while on loan. Cash collateral is invested in the lending agent's collective collateral investment pool which at June 30, 2014, had a weighted-average maturity of one day. The maturities of the resulting investments generally match the maturities of the securities lending arrangements. While the System bears no risk from the failure of a borrower to return a borrowed security, it does bear risk from investing the collateral. As noted above, cash collateral is invested in the lending agent's collective investment pool. Should the collective investment pool experience a period of poor investment returns due to market turbulence or other reasons, the System can record unrealized losses on a mark-to-market basis or realized losses from the default of securities in the investment pool.

#### D. Net Pension Liability, Actuarial Method and Assumptions

*Net Pension Liability*. The components of the net pension liability at June 30, 2014, were as follows:

Total pension liability	\$1,781,130,985
Plan fiduciary net position	(1,516,720,045)
Net pension liability	\$264,410,940

Plan fiduciary net position as a percentage of the total pension liability 85.2%

Actuarial Methods and Assumptions Information. The Total Pension Liability was determined by an actuarial valuation as of June 30, 2013, using the following actuarial assumptions, applied to all periods included in the measurement.

Discount rate, net of plan investment expenses	7.50%
Inflation	3.00%
Salary increases, including inflation	3.0% + merit
Investment rate of return, net of plan investment expenses	7.50%
Municipal bond rate	N/A
Projected period of unfunded benefit payments	None

The actuarial assumptions used have been recommended by the actuary and adopted by the System's Board of Trustees based on the most recent review of the System's experience completed in 2011. In the Schedule of Changes in Net Pension Liability, the beginning of year amount differs from the actuarial accrued liability listed in the July 1, 2013, actuarial valuation report due to differences in the funding method and assumption changes. GASB Statement No. 67 requires the use of a very specific funding method, which was not used in the previous valuations. The actuary recommended and the Board of Trustees adopted refinements for the recognition of unused sick leave balances in the development of the TPL.

The rate of employer contributions to the plan is composed of normal cost, amortization of the unfunded actuarial accrued liability and an allowance for administrative expenses. The normal cost is a level percent of payroll cost which, along with the member contributions, will pay for projected benefits at retirement for each plan participant. The actuarial accrued liability is that portion of the present value of projected benefits that will not be paid by future normal employer costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial accrued liability. The allowance for administrative costs is based upon the plan's actual administrative expenses.

The County is required to contribute at an actuarially determined rate; the rate for the year ended June 30, 2014, was 35.45 percent of annual covered payroll. The decision was made to commit additional funding and a rate of 36.43 percent was adopted for fiscal year 2014. Since the System's adjusted funded ratio (the ratio of the sum of the actuarial value of assets and commitments already made to fund changes to the actuarial accrued liability) has fallen below 90 percent, the contribution rate includes a margin to amortize this shortfall back to the 90 percent level. In fiscal year 2011, the target was increased to a 91 percent level and with the 2015 fiscal year contribution it will be increased again to 93 percent. The intent of the County is to continue increasing the amortization target until full actuarial funding has been restored. The goal is to reach an amortization to 100 percent in contributions at or before fiscal year 2022.

Mortality rates with adjustments for mortality improvements were based on the RP 2000 Mortality tables projected to 2015 using Scale AA.

For purposes of the GASB 67, the Total Pension Liability (TPL) was determined by applying standard update procedures to roll forward to the June 30, 2014 fiscal year-end, amounts from an actuarial valuation as of June 30, 2013.

The actuarial assumptions used in the June 30, 2013, valuation were based on the results of an actuarial experience study for the period July 1, 2005–June 30, 2010.

Long Term Expected Rate of Return. The long term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the Systems target asset allocation as of June 30, 2014, are summarized below.

	<b>Long Term Expected</b>
Asset Class	Real Rate of Return
U.S. Equities	4.50%
International Equities	5.10%
Private Equities	8.10%
Fixed Income	2.00%
Real Estate	5.30%
Alternatives	6.00%
Risk Parity	6.00%

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

In making this determination we assumed the outflows would equal the anticipated benefit payments from the 2013 actuarial valuation, the administrative expenses attributable to current actives were assumed to equal 0.25% of payroll. The inflows to the plan were assumed to continue at the average aggregate rate for the 2013 active population of 7.07% of payroll and County contributions were projected at 37.90% for fiscal years 2015 through 2036. After that time the County contribution was assumed to drop to the normal cost plus expenses (20.61%) since the unfunded actuarial liability is expected to be paid off by that time.

We also used the actual Fiduciary Net Position at June 30, 2014, in the projections.

Sensitivity of the Net Pension Liability to Changes in Discount Rate. The following presents the net pension liability of the County, calculated using the discount rate of 7.5 percent, as well as what the County's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.5 percent) or 1-percentage-higher (8.5 percent) than the current rate.

#### Sensitivity of Net Pension Liability to Changes in Discount Rate

	1% Decrease	<b>Discount Rate</b>	1% Increase
	<u>6.50%</u>	<u>7.50%</u>	<u>8.50%</u>
Total Pension Liability	\$2,066,236,723	\$1,781,130,985	\$1,554,084,893
Plan Fiduciary Net Position	1,516,720,045	<u>1,516,720,045</u>	<u>1,516,720,045</u>
Net Pension Liability	\$549,516,678	\$264,410,940	\$37,364,848
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	73.4%	85.2%	97.6%

#### E. Income Taxes

The Internal Revenue Service issued the System a determination letter 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.

# **Required Supplementary Information (unaudited)**

### Schedule of Changes in the Net Pension Liability and Related Ratios

For the fiscal year ending June 30, 2014

Total Pension Liability	
Service cost	\$39,647,527
Interest	125,659,578
Changes in benefit terms	0
Differences between expected and actual experience	0
Changes in assumptions	0
Benefit payments, including refunds of member contributions	(78,916,881)
Net change in Total Pension Liability	86,390,224
Total Pension Liability - beginning	1,694,740,761
Total Pension Liability - ending (a)	\$1,781,130,985
Plan Fiduciary Net Position	
Contributions - employer	\$56,094,690
Contributions - member	10,905,744
Net investment income	210,256,032
Benefit payments, including refunds of member	(70.016.001)
contributions	(78,916,881)
Administrative expenses	(433,541)
Net change in Plan Fiduciary Net Position	197,906,044
Plan Fiduciary Net Position - beginning	<u>1,318,814,001</u>
Plan Fiduciary Net Position - ending (b)	<u>\$1,516,720,045</u>
Net Pension Liability (Asset) - ending (a)-(b)	<u>\$264,410,940</u>
Plan Fiduciary Net Position as a Percentage of the	
Total Pension Liability	85.2%
Covered Employee Payroll	\$153,979,385
Net Pension Liability as a Percentage of covered Employee Payroll	171.72%
Employee rayion	1/1./2%

The total pension liability contained in this schedule was provided by Cheiron, the System's Actuary. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the Employees' Retirement System.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

#### **Schedule of Net Pension Liability**

Date	6/30/2014
Total Pension Liability	\$1,781,130,985
Plan Fiduciary Net Position	1,516,720,045
Net Pension Liability	<u>\$264,410,940</u>

Plan Fiduciary Net Position as a Percentage of the Total Plan

Liability 85.2% Covered employee payroll \$153,979,385

Net pension Liability as a

percentage of covered payroll 171.7%

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Employer Contribution
-----------------------------------

		Contributions			Contributions
		in relations to			as a
	Actuarial	the Actuarial	Contribution	Covered	Percentage of
Fiscal	<b>Determined</b>	<b>Determined</b>	Deficiency	<b>Employee</b>	Covered
<b>Year</b>	<b>Contribution</b>	<b>Contribution</b>	(Excess)	<b>Payroll</b>	<b>Payroll</b>
2014	\$56,094,690	\$56,094,690	\$-	\$153,979,385	36.43%
2013	53,722,160	53,722,160	-	153,491,886	35.00%
2012	50,351,335	50,351,335	-	148,924,386	33.81%
2011	45,817,015	45,817,015	-	149,924,787	30.56%
2010	40,771,184	40,771,184	-	154,086,107	26.46%
2009	40,855,102	40,855,102	-	154,403,258	26.46%
2008	39,085,662	39,085,662	-	148,445,355	26.33%
2007	36,486,832	36,486,832	-	140,280,015	26.01%
2006	32,135,984	32,135,984	-	128,956,597	24.92%
2005	27,192,791	27,192,791	-	124,167,995	21.90%

#### **Notes to Schedule**

Valuation Date 6/30/2013

Timing Actuarially determined contribution rates are calculated based on the

actuarial valuation one year prior to the beginning of the plan year

#### Key Methods and Assumptions Used to Determine Contribution Rates:

Actuarial cost method Entry Age Normal
Asset valuation method 3-year smoothed market

Amortization method Corridor method, amortize liability outside of 90% corridor over an

open 15 year period with level % of payroll. In fiscal year 2011

through 2014 the target was increased to a 91% level.

Discount rate 7.50% Amortization growth rate 3.00% Price inflation 3.00%

Salary increases 3.00% plus merit component based on employee's years of service

Mortality Sex distinct RP-2000 Combined Mortality projected to 2015 using Scale AA

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2014, can be found in the June 30, 2012, actuarial valuation report.

#### **Schedule of Money-Weighted Rate of Return**

Fiscal Year 2014 Annual Money-Weighted Rate of Return, Net of Investment Expense

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available

# **Additional Supplementary Information**

### **Schedule of Investment and Consultant Expense**

For the Year Ended June 30, 2014

Investment Activity Expense		
Investment Manager Fees		\$4,955,562
Custodial Fees		69,244
Consultant Expenses		
Consultant Expenses		189,025
Total Investment and Consultant Expenses		\$5,213,831
Total Investment and Consultant Expenses		<u> </u>
Schedule of Administr	rative Expenses	
as of June 30		
Personnel services		
Salaries and wages	\$213,154	
Fringe benefits	<u>88,142</u>	
Total personnel services		\$301,296
Professional services		
Actuarial	33,129	
Audit	<u>7,611</u>	
Total professional services		40,740
Communications		
Phone charges	3,028	
Printing, binding and copying	2,411	
Postage	<u>4,143</u>	
Total communications		9,582
Supplies		
Office supplies	<u>2,869</u>	
Total supplies		2,869
Other services and charges		
Board and staff travel and development	11,347	
Professional membership	831	

Total other services and charges 79,054 **Total Administrative Expenses** \$433,541

252

181 37,208

4,694

6,854

17,687

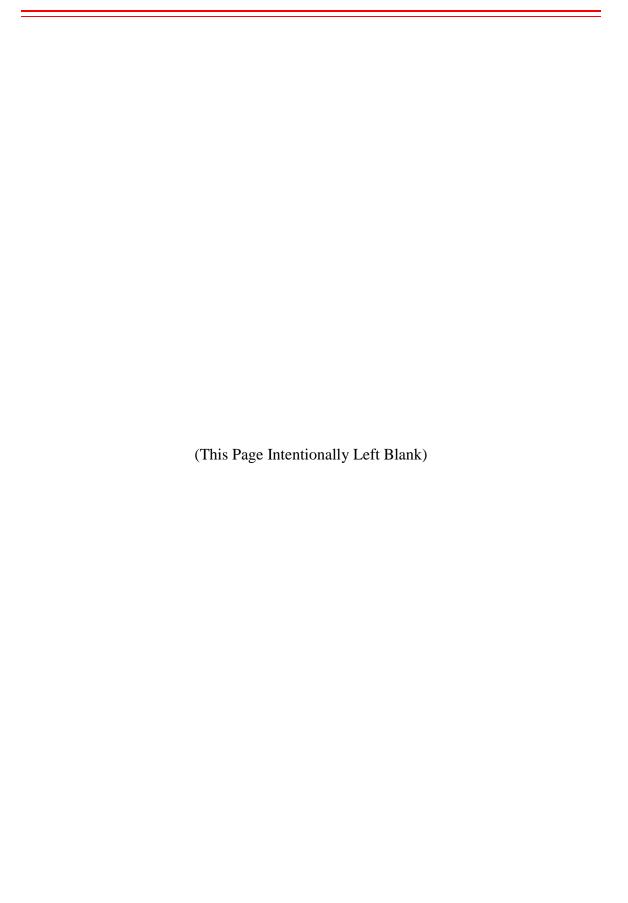
Professional subscription

Insurance

Building rent

Computer system Other operating

Equipment





# County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

December 5, 2014

Dear Members of the Board of Trustees:

Fiscal year 2014 followed a strong 2013 and the System benefited from strong performance across almost all asset classes. Global equities and fixed income assets ended in the black and their gains came amidst startlingly low volatility. Investors embraced risk-on trades as the Federal Reserve focused on creating jobs and kept in place an accommodative monetary policy. Investors showed resilience to headline risks related to the government shutdown, uncertainty as to Bernanke's successor, a severe downward revision to U.S. GDP, a reduction in the Fed quantitative easing program, and geopolitical tensions arising from Russia and the Middle East.

As the 2013 calendar year came to a close, the U.S. economy appeared to be picking up steam with rising growth and falling unemployment even as the Fed began to modestly taper its monetary stimulus. Investor sentiment turned positive in September 2013 when Janet Yellen emerged as the favored candidate to serve as the chair of the Federal Reserve. The U.S. consumer was a key driver to the strengthening economy with consumption, income and retail sales all achieving all time highs in the last fiscal quarter of 2014. U.S. Federal public debt continues to grow and now exceeds 100% of GDP, however higher debt levels, here and across the Globe, prove to be manageable in what many fear is an artificially low interest rate environment. In the final quarter of the fiscal year, all major asset classes moved higher - overlooking a severe revision downward for the first quarter U.S. GDP growth to -1.0%, attributed to poor weather.

Macro policy and politics affected global markets with fears of a slowdown in China's growth, European debt woes, and slowing growth in emerging markets. Most of the world's leading central banks maintained their supportive monetary policies. Following a strong fiscal 2013, growth assets in developed markets continued their upward trajectory, while emerging market stocks and bonds rallied in the last fiscal quarter to offset the weak performance in the prior quarter. Markets mostly shrugged off the geopolitical tensions arising from Russia taking control of Crimea, and the sustained economic slowdown in emerging economies. Emerging market assets continued their recovery with large inflows pouring into equity and debt during the last quarter as investors dismissed balance of payment concerns.

#### **Domestic Equity Markets**

U.S. equity markets were up strongly in 2014 fiscal year, producing positive returns across the board and outpacing a strong 2013. Throughout the year, investors shrugged off the "fiscal cliff", the change in leadership at the Federal Reserve, the "taper tantrum", the government shutdown, and geopolitical tensions in the Middle East. Large cap stocks outperformed small cap stocks by



**Fairfax County Retirement Systems** 

10680 Main Street \* Suite 280 \* Fairfax, VA 22030 Phone: 703-279-8200\*1-800-333-1633\*Fax: 703-273-3185

www.fairfaxcounty.gov/retirement/

+1.0% as the S&P 500 returned +24.6% for the fiscal year and finished the year by posting its 6<sup>th</sup> consecutive quarter of gains and the Russell 2000 returned +23.6% for the fiscal year. Large cap growth outperformed large cap value with the Russell 1000 Growth up 26.9% compared to +23.1% for the Russell 1000 Value. The same trend held true in smaller cap names as the Russell 2000 Growth returned +24.7 as compared with the Russell 2000 Value Index return of +22.5%.

#### **Domestic Fixed Income Markets**

Bond markets rallied for the fiscal year, with the star performers being high-yield bonds, leveraged loans, and U.S. credit. Credit spreads tightened significantly while the 10-Year U.S. Treasury bond yielding 2.5% finished the fiscal year essentially flat with the beginning of the year. For the fiscal year the Barclays Aggregate Bond Index returned +2.0% while high yield bonds posted strong gains returning +11.7%. Demand for floating-rate assets climbed through the year. With concern around rising interest rates, bank loans ended the year with gains of +5.6%, according to the S&P LSTA Loan Index. Despite record new supply, investment grade credit posted strong performance, with Barclays U.S. Credit gaining +7.4% for the one-year period ended June 30, 2014.

#### **International Markets**

International equity markets were boosted by improving economic data and lower debt yields in Europe, especially in some of the more troubled regions such as Greece, Italy, and Spain. International developed market equities as measured by the MSCI EAFE Index (a broad index of the international developed market equities) returned +24.1% for the year with the strongest contribution coming from Europe and the UK. Emerging market investments were bolstered by improving confidence in Latin America, positive election results in India, and better economic conditions in China. Emerging markets equities, as measured by the MSCI Emerging Markets Index, returned +14.7% for the year with the strongest results coming from Asia.

International fixed income markets were generally positive with the Barclay's Global Aggregate Bond Index up +7.4%. Emerging market debt was also a clear winner in the first half of 2014 following a challenging 2013. In addition to the accommodative action by the ECB, declining Treasury yields and economic stability in several emerging market countries provided a tailwind for the asset class. According to the JPM GBI-EM Global Diversified Index, emerging market debt had a stellar year, returning +11.6%.

#### **Uniformed System**

The Uniformed Retirement System operates a sound and diversified investment program with disciplined asset re-balancing to achieve strategic long-term goals. That disciplined investment process has been effective in achieving a long-term record of consistent asset growth.

For fiscal 2014, investments provided a return of 16.5%, gross of fees (16.1%, net of fees). The System's annualized rates of return, gross of fees, were 8.8% (8.4%, net of fees) over the last three years and 13.3%, (12.8%, net of fees), over the last five years. These System returns ranked in the 59th percentile of The Bank of New York Mellon universe of public plans in 2014, in the 84th percentile for the latest 3-year period, and in the 46th percentile of public plans for the last 5 years.

During the past twelve months, the System continued to focus on further diversifying risk and implementing the previously-adopted changes to long term allocation targets. The Board approved a 10% investment in the AQR Market Advantage fund, using funds from liquidation of several managers. Victory Capital and Dorset Asset Management were eliminated from the current manager lineup.

Sincerely,

Gregory A. Samay

Chief Investment Officer

# <u>Investments by Category and Investment Manager\*\*</u> June 30, 2014

	June 30, 2014	m . 15.	0/ 075 / 1
Asset Class	T 4 G4 T	Total Fair	% of Total
Manager	Investment Style	Market Value	Portfolio
Domestic Equities			
Advisory Research	Small/Mid Cap Value	\$56,752,347	3.7%
International Equities			
Acadian Asset Management*	Emerging Markets	69,561,515	4.6%
Marathon Asset Management - London	Developed Markets	141,530,590	9.3%
Private Equities			
HarbourVest Private Equity*	Private Equity	15,707,982	1.0%
J.P. Morgan Private Equity*	Private Equity	9,340,530	0.6%
Pantheon Private Equity*	Private Equity	11,095,860	0.7%
Fixed Income			
Anchorage Capital Partners*	Long/Short Credit	32,884,938	2.2%
Ashmore Investment Management*	Emerging Markets Debt	41,258,835	2.7%
Brandywine Asset Management	Global Bonds	80,387,519	5.3%
DoubleLine Capital	Mortgage-Backed Securities	80,836,363	5.3%
King Street Capital*	High Yield Bonds	30,027,702	2.0%
Pacific Investment Management Co. (PIMCO)	Total Return Core Bonds	78,653,574	5.2%
Pacific Investment Management Co. (PIMCO)*	Distressed Senior Credit	35,172,114	2.3%
SJC Direct Lending Fund*	Direct Lending	6,361,598	0.4%
Real Estate	<u> </u>		
Cohen & Steers Capital Management	Global Real Estate Securities	45,933,217	3.0%
UBS Realty*	Direct Real Estate	56,684,017	3.8%
Alternative Investments		, ,	
Artha Capital Management*	Emerging Markets Fund	19,118,903	1.3%
BlueCrest Capital Management*	Global Macro Absolute Return Fund	30,417,738	2.0%
Bridgewater Associates*	Global Macro Absolute Return Fund	50,800,576	3.4%
Criterion Capital Management*	Long/Short Technology Fund	33,522,044	2.2%
Davidson Kempner Capital Management*	Mutli-Strategy Fund	28,991,601	1.9%
FrontPoint Partners*	Enhanced S&P 500 Index	254,403	0.0%
Gramercy*	Emerging Markets Multi-Strategy	22,477,165	1.5%
Orbimed Advisors*	Long/Short Absolute Return Fund	46,793,283	3.1%
Ramius Value and Opportunity*	Small Cap Value Activist	36,803,761	2.4%
Inflation Hedges	r	,, -	
Gresham Inflation Hedges*	Commodities	13,902,280	0.9%
Wellington Diversified Inflation Hedges*	Commodities	36,948,012	2.5%
Balanced Portfolios		2 4,5 10,01	
AQR Market Advantage*	Risk Parity	150,872,214	10.0%
Bridgewater All Weather*	Risk Parity	129,632,182	8.6%
Cash and Short-term Investments		12>,002,102	0.070
BNY Mellon Cash Investment Strategies	Plan Level Cash Accounts	77,722,308	5.1%
Cash Held at County Treasurer		1,944,617	0.1%
The Clifton Group	Operating Cash Account		
The Chilon Group	Beta Manager	44,020,275	<u>2.9%</u>

**Net Assets** 

\$1,516,410,063

100.0%

<sup>\*\*</sup> Refer to page 7-8 for complete listing of investment professionals.

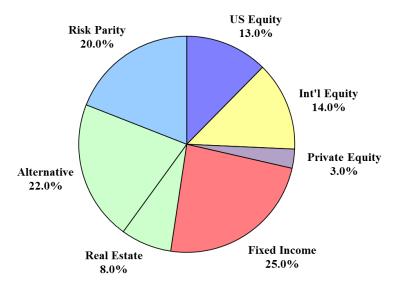
#### **Uniformed Retirement System – Allocation of Market Exposures**

#### **Target Asset Allocation**

The asset structure shown below represents the Trustees' assessment of their optimal asset allocation as of June 30, 2014. The target asset allocation provides a reasonable expectation that the System's investment objectives can be achieved based on historical relationships of asset class performance.

The pie chart below details the target asset mix, consistent with the achievement of the long-term objectives of the System, as of June 30, 2014.

# **Target Market Exposure**



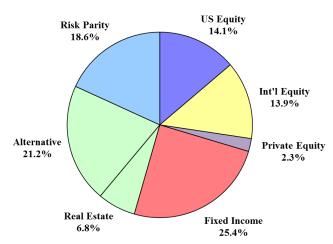
Total Exposure exceeds 100% from the addition of futures and other derivative instruments

#### Actual Asset Allocation as of June 30, 2014

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

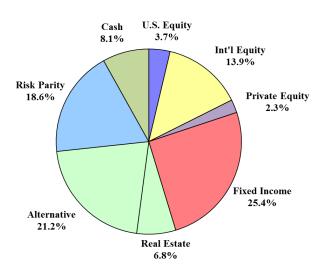
The pie chart below details the actual asset allocation as of June 30, 2014.

#### **Actual Market Exposure**



Total Exposure exceeds 100% from the addition of futures and other derivative instruments

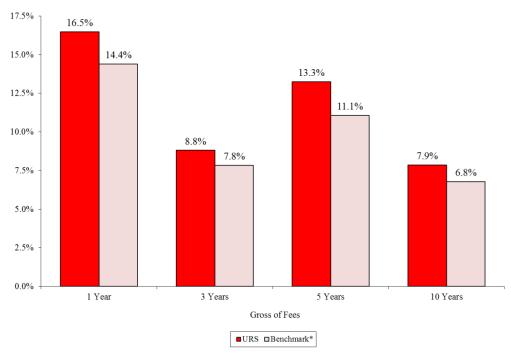
#### **Actual Allocation of Capital**



#### **Investment Results**

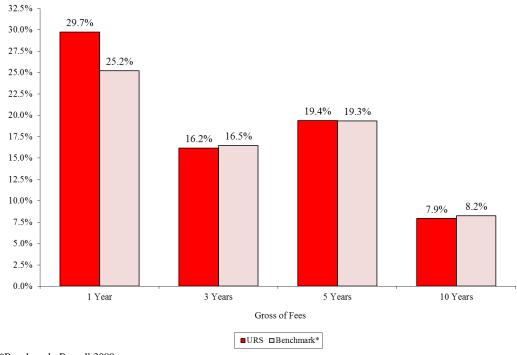
(Time weighted return, gross of fees)

#### **Total Fund:**



\*Blended Benchmark. Current Benchmark:14.5% S&P 500, 4% Russell 2000, 9.5% MSCI EAFE, 3% MSCI EAFE Small Cap, 5% MSCI EMF, 9% BarclaysAggregate, 5% CSFB High Yield, 5% Citigroup WGBI, 3% JPM EMBI Global Diversified, 3% Barclays TIPS, 4% NCREIF ODCE, 4% FTSE EPRA/NAREIT, 14% 90 Day T-Bill +3%, 3% DJ UBS Commodity, 4% Cambridge All Private Equity, 10% - 60% MSCI World (Gross) and 40% CITI WGBI

#### **Domestic Equity:**

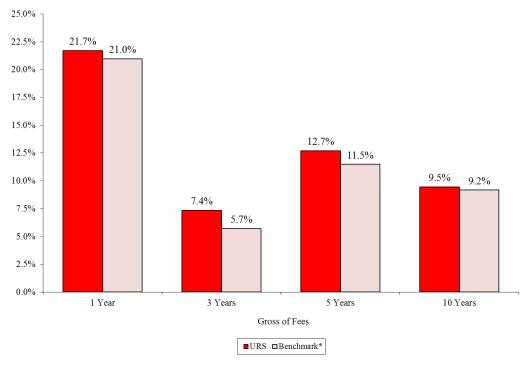


\*Benchmark: Russell 3000

### **Investment Results**

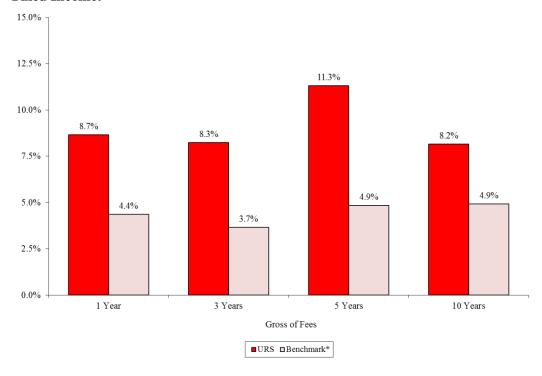
(Time weighted return, gross of fees)

#### **International Equity:**



<sup>\*</sup>Benchmark: 66.7% MSCI EAFE, 33.3% MSCI Emerging Markets Free Gross

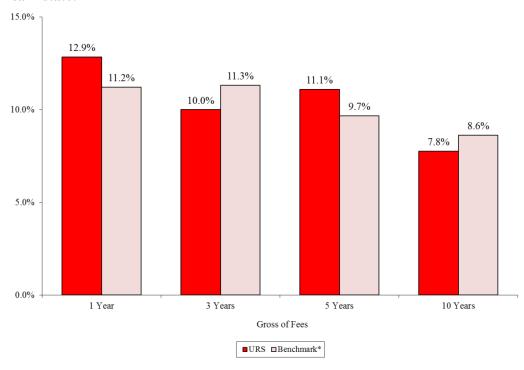
#### **Fixed Income:**



\*Benchmark: Barclays Aggregate

<u>Investment Results</u> (Time weighted return, gross of fees)

#### **Real Estate:**



\*Benchmark: NCREIF Property Index

# **Schedule of Ten Largest Equity & Fixed Income Holdings\***

### **Ten Largest Equity Holdings\***

argest Equit	, includings			% of Total
No. Shares	<b>Description</b>	Cost	Fair Value	<u>Portfolio</u>
27,374	Coloplast-B	\$293,237	\$2,475,383	0.16%
28,560	Tribune Media Company Class A	1,541,010	2,427,600	0.16%
59,820	Allied World Assurance Company	1,801,639	2,274,356	0.15%
42,347	Vestas Wind System	474,580	2,136,326	0.14%
32,590	Gulfport Energy Corp	1,439,748	2,046,652	0.13%
48,697	Alexander & Baldwin Inc	1,509,152	2,018,491	0.13%
43,700	CIT Group Inc	1,773,594	1,999,712	0.13%
8,510	Pioneer Natural Resources Co	838,193	1,955,683	0.13%
35,120	Oshkosh Corp	1,390,196	1,950,214	0.13%
30,800	Nippon Tel & Tel Corp	<u>1,484,684</u>	<u>1,920,877</u>	0.13%
	Total	<u>\$12,546,033</u>	<u>\$21,205,294</u>	<u>1.39%</u>

### **Ten Largest Fixed Income Holdings\***

Par Value (in local values)	<u>Description</u>	Cost (in U.S. Dollars)	Fair Value (in U.S. Dollars)	% of Total <u>Portfolio</u>
8,600,000	U.S. Treasury Note, 0.750, 01/15/2017	\$8,615,117	\$8,614,104	0.57%
6,407,000	U.S. Treasury Bill, 0.000%, 10/16/2014	6,405,380	6,406,167	0.42%
6,000,000	Commit To Pur Fnma Sf Mtg, 4.000%, 07/01/2044	6,314,688	6,367,500	0.42%
3,855,000	Italy Buoni Poliennali Del Tes, 5.000%, 08/01/2039	4,286,637	6,266,604	0.41%
5,000,000	Commit To Pur Fnma Sf Mtg, 3.500%, 08/01/2044	5,078,125	5,131,250	0.34%
52,750,000	Mexican Bonos, 7.750%, 11/13/2042	4,496,757	4,604,518	0.30%
2,650,000	United Kingdom Gilt, 2.750%, 01/22/2015	4,523,231	4,587,515	0.30%
45,330,000	Mexican Bonos, 8.500%, 05/31/2029	4,092,812	4,268,452	0.28%
4,095,000	New South Wales Treasury Corp, 5.000%, 08/20/2024	3,731,728	4,221,889	0.28%
4,330,000	U.S. Treasury Bond, 2.875%, 05/15/2043	<u>3,835,354</u>	3,986,538	0.26%
	Total	<u>\$51,379,829</u>	<u>\$54,424,537</u>	<u>3.58%</u>

<sup>\*</sup>Full disclosure of holdings is available upon request.

# Schedule of Brokerage Commissions As of June 30, 2014

Broker Name	Base Volume	Total Shares	Base Commission	Commission Percentage
Batucha Securities & Inv Ltd, Tel-Aviv	\$499,563	45,025	\$1,494	0.30%
National Finl Svcs Corp, New York	251,675	28,065	640	0.25%
Janney Montgomery Scott, Philadelphia	62,347	4,808	144	0.23%
Ocbc Secs, Singapore	158,315	88,000	317	0.20%
Standard Chartered Bank Ltd, Hong Kong	925,614	522,220	1,855	0.20%
Standard Chartered Bank, Hong Kong	245,834	153,400	493	0.20%
Hong Kong & Shanghai Bkg Corp, Singapore	354,150	156,822	709	0.20%
Daiwa Secs (Hk) Ltd, Hong Kong	160,945	42,048	322	0.20%
Hong Kong & Shanghai Bkg Corp, Hong Kong	311,551	128,600	623	0.20%
Jp Morgan Secs, Singapore	291,673	128,350	582	0.20%
Wilson Htm Ltd, Brisbane	429,076	92,826	856	0.20%
China Intl Cap Corp Hk Secs, Hong Kong	65,329	13,675	130	0.20%
Dbs Vickers (Hong Kong) Ltd, Hong Kong	80,582	43,343	149	0.18%
Jp Morgan Secs Asia Pacific, Hong Kong	875,536	552,094	1,600	0.18%
Macquarie Securities (Usa) Inc Jersey City	471,430	27,924	860	0.18%
Dbs Vickers Sec Pte Ltd, Singapore	76,518	40,871	137	0.18%
Standard Chartered Bank, Hong Kong	733,540	1,072,900	1,284	0.18%
Credit Suisse (Europe), Seoul	201,168	1,800	350	0.17%
Ixis Securities, Paris	3,022	40	5	0.17%
Barclays Capital, London	1,840,893	190,875	2,836	0.15%
Macquarie Bank Ltd, Hong Kong	1,775,079	584,186	2,724	0.15%
Rbc Capital Markets Llc, New York	672,126	31,137	1,028	0.15%
Citigroup Gbl Mkts/Saloman, New York	1,817,320	396,255	2,759	0.15%
Banco Portugues De Investimiento, Lisbon	499,744	41,870	751	0.15%
BNP Paribas Bkrge (Int), King of Prussia	419,077	10,422	630	0.15%
Rabobank Nederland, Utrecht	1,051,985	28,261	1,580	0.15%
Carnegie Asa, Oslo	1,401,036	455,355	2,105	0.15%
Svenska Handelsbanken, London	26,694	473	40	0.15%
Petercam Sa, Brussells	225,440	5,583	339	0.15%
Commonwealth Bk Of Australia, Sydney	13,409	8,105	20	0.15%
Skandinaviska Enskilda, Stkhlm	13,270	54	20	0.15%
Svenska Handelsbanken, Stockholm	566,112	52,137	850	0.15%
Svenska Handelsbanken, New York	1,809,482	114,503	2,715	0.15%
Penson Financial Serv Australia Sydney	146,160	33,960	2,713	0.15%
, ,				
Bank J Vontobel & Co Ltd, Zurich	1,677,814	4,965	2,518	0.15%
Macquarie Securities Ltd, Auckland	1,475,549	351,750	2,214	0.15%
Carnegie Secs Ltd, Helsinki	949,275	47,496	1,424	0.15%
Nomura Secs Intl Inc, New York	2,145,892	79,700	3,219	0.15%
Mitsubishi Ufj Sec (Usa), New York	2,769,920	150,697	4,155	0.15%
Kepler Equities, Paris	799,186	33,425	1,199	0.15%
Den Danske Bank, Copenhagen	532,387	14,500	798	0.15%
Smbc Securities, Inc New York	1,351,635	45,955	2,027	0.15%
Skandinaviska Enskilda Banken, London	2,821,777	166,642	4,232	0.15%
Oddo Et Cie, Paris	596,795	3,405	895	0.15%
Bnp Paribas Peregrine Sec Ltd, Hong Kong	1,117,309	103,155	1,675	0.15%
Citibank Ltd, Melbourne	696,586	319,563	1,044	0.15%
Berenberg Gossler & Cie, Hamburg	1,551,756	42,971	2,326	0.15%
D Carnegie Ab, Stockholm	843,200	65,746	1,264	0.15%
Mizuho Securities Usa Inc. New York	3,276,692	217,871	4,910	0.15%
Pershing Securities Ltd, London	781,817	25,931	1,171	0.15%
Other Brokers	292,499,301	31,499,538	279,148	0.10%
Total	<u>\$334,362,586</u>	<u>38,269,297</u>	<u>\$345,385</u>	<u>0.10%</u>

<u>Investment Summary</u> (Based on Capital Allocation)

	<b>As of June 30, 2013</b>		As of Jun	e 30, 2014
	Market Value	% Market Value	Market Value	% Market Value
Domestic Equities	\$195,960,740	14.7%	\$56,752,347	3.7%
International Equities	214,153,271	16.4%	211,092,105	13.9%
Private Equities	33,783,654	2.6%	36,144,372	2.3%
Fixed Income	397,346,013	30.2%	385,582,643	25.4%
Real Estate	91,714,328	6.9%	102,617,234	6.8%
Alternative Investments	245,962,537	18.6%	320,029,766	21.2%
Risk-Balanced Portfolios	113,396,011	8.6%	280,504,396	18.6%
Short-term	26,499,001	2.0%	123,687,200	<u>8.1%</u>
Total	<u>\$1,318,815,555</u>	<u>100.0%</u>	<u>\$1,516,410,063</u>	<u>100.0%</u>



Classic Values, Innovative Advice

March 24, 2014

Fairfax County Uniformed Retirement System 10680 Main Street, Suite 280 Fairfax, Virginia 22030-3812

Dear Members of the Board:

At your request, we have conducted our annual actuarial valuation of the Fairfax County Uniformed Retirement System as of July 1, 2013. The results of the valuation are contained in this report.

#### Funding Objective

The funding objective of the System is to establish contribution rates which, over time, will remain level as a percent of payroll and will fully fund the actuarially determined contribution. In order to achieve a more stable contribution rate the County implemented a corridor funding method on July 1, 2002, (based on the July 1, 2001, valuation results). Under this approach the contribution rate is based on the normal cost rate and expense rate on July 1, 2001, adjusted for subsequent plan changes, including a 15 year amortization of any UAL impact. This rate includes an additional charge once the actuarial funded ratio falls below 90%. Originally this additional charge was designed to amortize the amount of underfunding to the 90% threshold. The actuary and Board have recommended and the Employer has taken steps to increase this target from 90% until it reaches a target of 100%.

#### Assumptions

The actuarial assumptions used in performing the July 1, 2013, valuation were recommended by the actuary and adopted by the Board of Trustees based on our most recent review of the System's experience for the five year period ending June 30, 2010. The assumptions reflect our understanding of the likely future experience of the System and the assumptions as a whole represent our best estimate for the future experience of the System. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the underlying assumptions, the results would vary accordingly.

The assumptions and methods used in determining the assets liabilities, and the annual required contributions of the employer as defined by the Government Accounting Standards Board (GASB) meet the parameters set by GASB Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contributions Plans.

#### Reliance on Others

In preparing our report, we relied on information (some oral and some written) supplied by the Retirement System. This information includes, but is not limited to, plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standards of Practice No. 23.

1750 Tyxons Boulevard, Suite 1100, McLean, VA 22102

Tel: 703.893.1456

ax: 703.893.2006

www.cheiron.us





March 24, 2014 Fairfax County Uniformed Retirement System Page 2

#### Supporting Schedules

We are responsible for all supporting schedules to be found in the Actuarial Section.

We are responsible for the 2004 through 2013 information shown in historical sections of this report. All data shown prior to 2004 was prepared by the prior actuary.

#### Compliance with Code of Virginia §51.1-800

Code of Virginia §51.1-800 requires that the benefits provided to a retiree at age 65 from a local retirement system equal or exceed two-thirds of the allowance to which the employee would be entitled under the provisions of the Virginia Retirement System (VRS).

Although there is no formal procedure for making this comparison, we compared the least valuable rate under the Uniformed System to the most valuable accrual rate under the VRS, making adjustments for the fact that employee contributions are required in excess of the VRS 5% rate. The employer provided accrual rates do exceed two-thirds of the employer provided accrual rates under the VRS plan.

We certify that, to the best of our knowledge and understanding, the Fairfax County Uniformed Retirement System satisfies the requirements of the Code of Virginia §51.1-800.

#### Certification

We, are consulting actuaries for Cheiron. We are also Members of the American Academy of Actuaries and meet their Qualification Standards to render the actuarial opinion contained herein.

We hereby certify that, to the best of our knowledge, this report and its contents, have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained herein.

Sincerely, Cheiron

Fiona E. Liston, FSA

**Principal Consulting Actuary** 

Tiona Ehista

Christian E. Benjaminson, FSA Principal Consulting Actuary

#### **Summary of Valuation Results**

#### Overview

This report presents the results of the July 1, 2013, actuarial valuation of the Fairfax County Uniformed Retirement System. The primary purposes of performing the annual actuarial valuation are to:

- Measure and disclose, as of the valuation date, the financial condition of the System;
- Indicate trends in the financial progress of the System;
- Determine the contribution rate to be paid by the County for Fiscal Year 2015; and
- Provide specific information and documentation required by the Governmental Accounting Standards Board (GASB).

This section of the report presents a summary of the above information in the form of:

- The actuary's comments;
- The prior year's experience of the System's assets, liabilities, contributions, and membership;
- A series of graphs which highlight key trends experienced by the System; and
- A summary of all principal results from this year's valuation, compared to last year's, in a single table, intended for quick reference purposes.

#### **General Comments**

Fairfax County's annual contribution to this System is determined by using a corridor funding method. Under this funding approach, the County's contribution rate is based on the normal cost rate determined as of the implementation date of the corridor method (July 1, 2001) 17.55% of payroll, plus an expense rate, currently 0.25% of payroll. This rate is adjusted for plan and assumption changes. The rate includes an additional charge once the actuarial funded ratio falls below 90%. Originally this additional charge was designed to amortize the amount of underfunding to the 90% threshold. The actuary and Board have recommended and the Employer has taken steps to increase this target from 90% until it reaches a target of 100%.

The County's contribution rate will change when benefits are increased or modified or assumptions are changed. The new rate will reflect the change in normal cost rate and the change in actuarial liability amortized over 15 years. Since the inception of the corridor funding method, the normal cost rate has increased by 1.92% and the UAL rate has increased by 7.10%, the specific changes are summarized in the table on the next page:

	<u>Impac</u>	t on
	Normal Cost	UAL
<u>Changes Since 2001</u>	<u>Rate</u>	<u>Rate</u>
2002 Pre-Social Security Supplement	+ 1.40%	+ 2.45%
2002 ad-hoc COLA	N/A	+ 0.25%
2004 Retiree Increase	N/A	+ 1.70%
2004 DROP	+ 0.17%	+ 0.53%
2005 Assumption Changes	+ 0.18%	+ 0.91%
2006 DPSC Transfer	N/A	+ 0.62%
2007 Reduce Disability Offset	+ 0.02%	+ 0.30%
2008 Reduce Disability Offset	+ 0.01%	+ 0.12%
2010 Assumption Changes	+ 0.13%	+ 0.17%
2013 Reduce Disability Offset	+ 0.01%	+ 0.05%
Total Increase	+ 1.92%	+ 7.10%

The basic corridor funding contribution is currently 26.82% of payroll. The normal cost rate and actuarial accrued liability will continue to be measured using the entry age funding method. If the funded status falls outside the corridor, a credit (if above 120%) or charge (if below 90%, or other higher amounts) will be established based on a 15-year amortization equal to the amount necessary to re-enter the corridor.

The valuation as of July 1, 2013, shows that the actuarial funded ratio (including a credit for the amortization of prior benefit increases and assumption changes) remains outside of the corridor.

The employer contribution rate for FY 2015 as calculated under this method decreases from 35.45% to 34.70% of payroll, on the basis of this year's valuation results. The County's FY 2014 contribution was actually based on amortizing to reach 91% funded, rather than amortizing just to re-enter the corridor and in FY 2015 the actuary and Board have recommended they contribute an amount to amortize to 93% funded. On that basis, the contribution in FY 2014 was 36.43% and for FY 2015 it will be 37.79%.

The calculated contribution rate for Governmental Accounting Standards Board (GASB) purposes is based on a rolling 15-year amortization of the actuarial unfunded liability.

#### **Trends**

The financial markets increased during the fiscal year ending in 2013, however due to the unrecognized loses still being phased in, there was a small loss on the asset side of the System. The actual return on a market value basis was approximately 10.00%. On an actuarial value basis, the assets returned 7.19% compared with an assumed rate of return of 7.5%. The loss recognized for funding purposes was \$3.8 million.

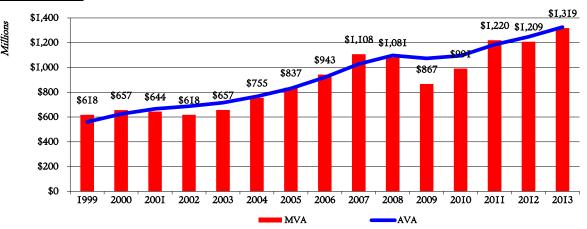
The measurement of liabilities produced a gain this year in the amount of \$24.1 million. This gain was due to experience not meeting our assumptions about salary increases, retirement behavior, death, etc. Specific components of the gain include:

- The average salary increase was 1.4% for active participants who were in both the July 1, 2012 and July 1, 2013 valuations. This was less than the expected salary growth based on the actuarial assumption, which worked out to average 6.1%. This resulted in a gain of \$20.7 million. The annual payroll was provided as of December 31, 2012 and adjusted to July 1, 2013; which included annualizing the 2.18% increase from July 1, 2012.
- The valuation assumed a 2.75% cost-of-living adjustment in 2013 for benefits in pay status. The actual CPI-based COLA was 1.4% last year, creating a liability gain of \$10.8 million.
- The 2013 valuation incorporates actual sick leave hours into both eligibility and projected benefits for active participants. The accrual of additional sick leave from 2012 to 2013 produced a loss of \$1.8 million, as we do not currently include an assumption regarding sick leave accrual.
- An annual component of liability loss is the delayed recognition of new hires throughout the year. This does not contribute to an increase in the System's unfunded liability because both the member and the employer make contributions from the date of hire. However, when we look only at the liability side, they are a component of the annual liability loss, and this year they contributed \$1.3 million to that number.
- There was a \$4.3 million liability loss component that is made up of various other causes such as members terminating, retiring, dying or becoming disabled in a way contrary to the assumption and also data changes from previous years.

The combination of liability and investment experience and County plus member contributions over the last year caused an increase in the System's funding ratio (actuarial value of assets over actuarial accrued liability) from 77.3% at July 1, 2012 to 79.1% at July 1, 2013. For purposes of measuring whether the System remains within the funding corridor, an adjusted funding ratio is used. In this ratio, there is an additional asset recognized in the amount of the unfunded actuarial liability (UAL) payments being made by the County to pay for benefit increases and assumption changes. On this basis, the System's actuarial funded ratio increased from 81.1% at July 1, 2012 to 82.4% at July 1, 2013.

It is important to take a step back from the latest results and view them in the context of the System's recent history. On the next two pages, we present a series of charts which display key factors in the valuations over the last 15 years. After the historical review, we present a few projection graphs, showing the possible condition of the System over the next 15 years under various market return scenarios.

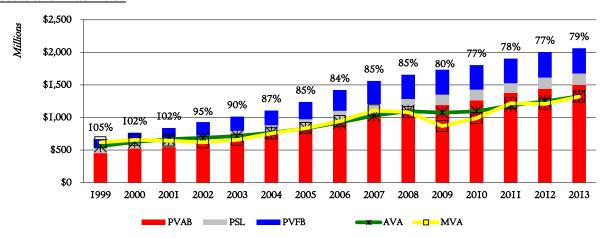
#### Growth in Assets



There was an increase in the market value of assets (MVA) over last year due to a return of 10.0%. The actuarial value of assets (AVA) increased but not by as much since there were \$39 million in unrecognized losses as of the 2012 valuation. Thanks to better than expected market returns, these losses were pared down to \$7.6 million.

Over the period of July 1, 1999, to June 30, 2013, the System's assets returned approximately 6.1% per year measured at actuarial value, compared to a valuation assumption of 7.5% per year.

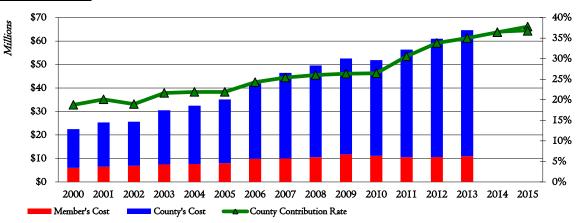
#### Assets and Liabilities



The three colored bars represent the three different measures of liability mentioned in this report. The amount represented by the top of the blue bars, the present value of future benefits (PVFB), is the amount needed to provide all benefits for the current participants and their beneficiaries. If the System had assets equal to the PVFB, no contributions would, in theory, be needed for the current members. For funding purposes, the target amount is represented by the top of the gray bar. We compare the actuarial value of assets to this measure of liability in developing the funded percent. These are the percentages shown in the graph labels.

Since 2007, the System's funded status has declined from 85% to 79% as a result of investment gains and losses, liability gains and losses, and the underfunding inherent in the corridor method once it falls below 90%.

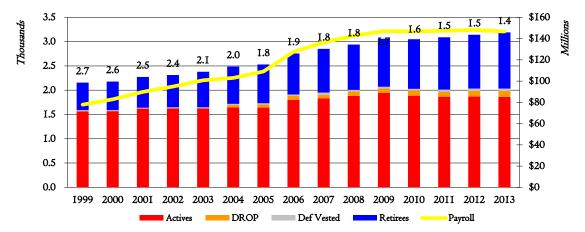
#### **Contribution Rates**



The stacked bars in this graph show the contributions made by both the County and the members (left hand scale). The green line shows the County contribution rate as a percent of payroll (right hand scale).

The member contribution rate is set by the County Ordinance. The County contribution rate is set by the actuarial process, as constrained by the corridor method. Note there is a lag in the rate shown. For example, the 2013 value is the rate prepared by the 2011 valuation and implemented for the period July 1, 2012, to June 30, 2013. For FY 2015, the graph shows both the base corridor contribution rate and the anticipated rate using the "amortize to 93%" approach.

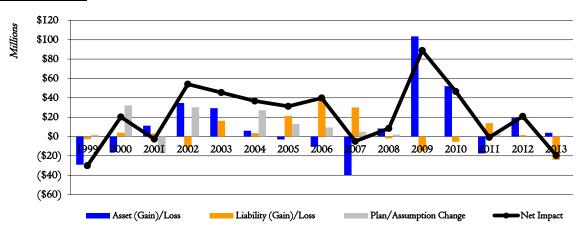
#### **Participant Trends**



As with many funds in this country, there has been a steady growth in the number of retired members as the System has matured. The active-to-inactive ratio has decreased from 2.7 actives to each inactive in 1999 to 1.4 actives for each inactive today. While this would be an alarming trend in a pay-as-you-go system, the pool of invested assets has been established in anticipation of this development.

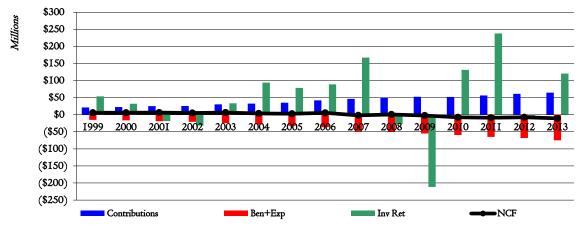
Starting in 2004, the chart also shows the number of DROP participants. Neither employer nor member contributions are made on their behalf, which leads to a slightly lower growth in effective covered payroll for this System.

#### Gains and Losses



This graph shows the annual gains and losses experienced by the System, along with the change in unfunded actuarial liability (UAL) due to plan amendments and changes in assumptions. The black line shows the net impact of all such changes in a given year. Positive numbers represent increases in the UAL while negative numbers show reductions.

#### Cash Flow



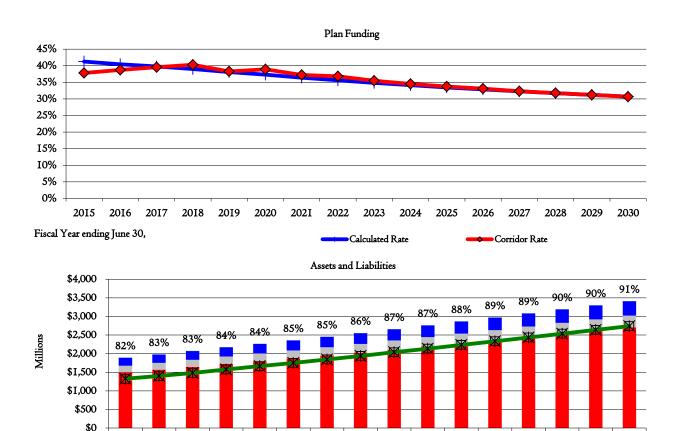
The graph shows the annual cash flows into and out of the System. The graph shows the magnitude of the investment returns on the market value (green bars) compared to the contributions (blue bars). The net cash flow (line) is comparing the contributions to benefits and expenses (red bar). Negative cash flow is expected for a mature plan such as this one. The implications of a plan with negative cash flow are that the impact of market fluctuations can be more severe. This is because as assets are being depleted to pay benefits in down markets, less principal is available to be reinvested during periods of favorable returns.

#### **Future Outlook**

#### **Base-line Projections**

The two graphs below show the expected progress of the System over the next 15 years assuming the System's assets earn 7.5% on their *market value*.

The graph entitled "Plan Funding" shows the projected contribution rates assuming the target corridor percent is increased each year from 93% to 100%. The corridor contribution rate is projected to decline over the period as the stored investment gains are fully phased-in and as plan change bases become fully amortized and drop out, but the System does not re-enter the corridor (if all other actuarial assumptions are met as well as the 7.5% interest rate). The blue line shows the actuarially calculated rate if the corridor were not in place.



2013

Valuation Date July I,

2014

2015

2016 2017

2018

2019

PVAB

2020

202I

2022

2023

PVFB

2024

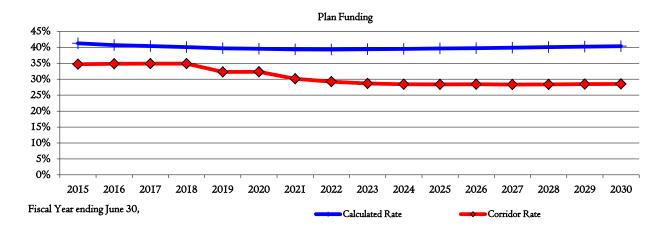
2025

\_\_\_MVA **\_** 

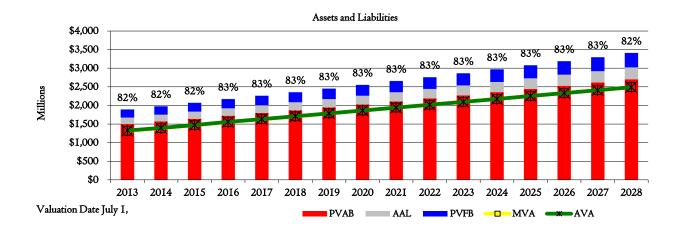
2026

2027

The System ordinance calls for amortizing to 90% of the corridor. The following graphs show the impact on County contributions and System funded status if the corridor target is not changed. Under these projections the County contribution decreases even more but at the expense of the System's funded ratio.



The "Assets and Liabilities" graph shows the projected funding status over the next 15 years. The funded ratio slowly increases in the short-term and then basically marks time and keeps the System around 83% funded.



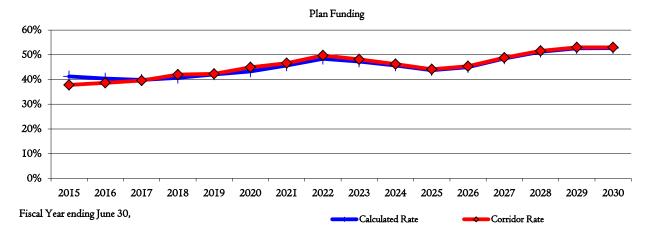
The future funding status of this System will be influenced by the investment earnings. The prior projection assumed the System would earn 7.5% each and every year, which is extremely unlikely.

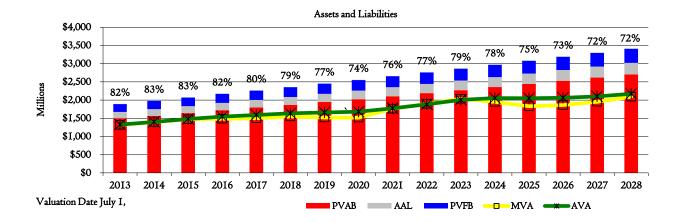
In the projections that follow, we show the risk to the System under volatile markets. Since 1980 the System has averaged 9.27% return per year. Therefore, for this analysis we have created the following three scenarios that produce the same average return.

Fiscal Year Ending June 30,	Average 5.0%	Average 7.5%	Average <u>10.0%</u>
2013	7.67%	2.34%	-5.85%
2014	7.05%	7.17%	4.54%
2015	1.67%	17.72%	18.15%
2016	2.98%	30.01%	32.56%
2017	5.16%	19.42%	-8.98%
2018	-0.19%	5.61%	12.47%
2019	1.48%	11.03%	17.81%
2020	17.59%	4.30%	-13.95%
2021	9.50%	15.60%	15.19%
2022	9.25%	-0.44%	14.83%
2023	-2.11%	2.05%	28.45%
2024	-3.75%	-8.37%	24.92%
2025	4.20%	4.65%	3.95%
2026	7.27%	-0.59%	7.37%
2027	9.17%	7.83%	10.22%
Average	5.00%	7.50%	10.00%

# Alternative Projection -- with average return of 5.0% in the period

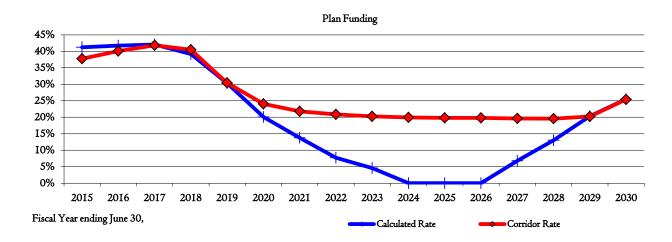
Under this scenario, the corridor contribution rate increases from 35% to about 53% of payroll. The System funding drops to 72% even with the ramping up of contributions from 93% of the corridor to 100%.

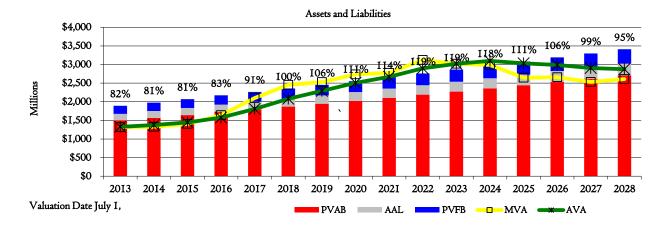




### Alternative Projection – with average return of 7.5% in the period

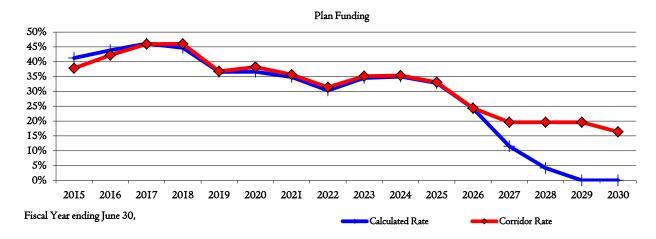
Under this scenario, the corridor contribution rate increases until the System re-enters the corridor in 2017 and reaches full funding in 2018. This is a different pattern of returns than that shown earlier. The timing of the return pattern can significantly influence the projected funding ratios and contribution levels.

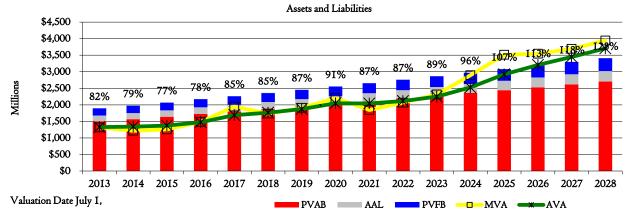




# Alternative Projection -- with average return of 10.0% in the period

Under this scenario, the corridor contribution rate declines most years of the projection period until reaching the level of just paying normal cost by 2027.





Summary of Principal Plan Results							
Valuation as of:		7/1/2012		7/1/2013	% Chg		
Participant Counts							
Actives (excluding DROP)		1,870		1,862	-0.4%		
DROPs		119		126	5.9%		
Terminated Vesteds		44		47	6.8%		
In Pay Status		1,109		1,155	4.1%		
Total		3,142		3,190	1.5%		
Annual Salaries of Active Members	\$	148,235,740	\$	146,597,688	-1.1%		
Annual Retirement Allowances for							
Retired Members and Beneficiaries							
(Base amount only – not supplements)	\$	59,412,133	\$	63,939,689	7.6%		
Assets and Liabilities							
Actuarial Accrued Liability	\$	1,613,654,132	\$	1,676,265,698	3.9%		
Assets for Valuation Purposes	4	1,247,526,438	4	1,326,424,772	6.3%		
Unfunded Actuarial Liability	\$	366,127,694	\$	349,840,926	-4.4%		
Funding Ratio		77.3%	·	79.1%			
Present Value of Accrued Benefits	\$	1,441,983,267	\$	1,501,617,558	4.1%		
Market Value of Assets	Ψ	1,208,864,603	Ψ	1,318,814,001	9.1%		
Unfunded Accrued Liability	\$	233,118,664	\$	182,803,557	-21.6%		
(not less than \$0)	·	, -,	·	- <b>, ,</b>			
Accrued Benefit Funding Ratio		83.8%		87.8%			
Contributions as a Percentage of Payroll	Fis	cal Year 2014	Fis	cal Year 2015			
GASB Method: Normal Cost Contribution		19.46%		19.47%			
Unfunded Actuarial Liability Contribution		22.27%		21.52%			
Administrative Expense		0.25%		0.25%			
Total Contribution	_	41.98%	_	41.24%			
Corridor Method:		40.45		40.4			
Normal Cost Contribution		19.46%		19.47%			
Increase Due to Amortized Changes		7.05%		7.10%			
Amortization of Amount Outside Corridor		8.69%		7.88%			
Administrative Expense		0.25%		$\frac{0.25\%}{24.70\%^2}$			
Corridor Method		35.45% <sup>1</sup>		34.70% <sup>2</sup>			

<sup>&</sup>lt;sup>1</sup> The actual contribution rate being paid by the County in FY 14 is 36.43%.
<sup>2</sup> Corridor Method based on amortization to 90% per current funding policy. Alternative rate calculations developed by amortizing to 93% is 37.79%.

#### **Summary of Actuarial Assumptions and Methods**

#### **Funding Method**

The funding method used for GASB disclosure purposes is the "aggregate accrual modification of the Entry Age Normal Cost method." Under this method, the employer contribution has three components: the normal cost, the payment toward the unfunded actuarial liability, and the expense rate.

The normal cost is a level percent of pay cost which, along with the member contributions, will pay for projected benefits at retirement for the average plan participant. The level percent developed is called the normal cost rate, and the product of that rate and payroll is the normal cost.

The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and funds accumulated as of the same date is referred to as the unfunded actuarial liability.

The expense rate is added to cover the System's administrative expenses.

The County contributions are calculated using the same basic actuarial method (EAN). However, in order to produce a more level contribution rate, the System has adopted a Corridor Funding Method.

Under the Corridor Funding Method, the County's total contribution rate is equal to the normal cost rate, plus rate changes due to assumption changes or amendments passed since July 1, 2001, plus the expense rate as long as the System's actuarial funded status remains within a corridor of 90% to 120%. If the funded status falls outside the corridor, a credit (if above 120%) or charge (if below 90%) will be established based on a 15-year amortization equal to the amount necessary to re-enter the corridor. Once the funded status is within the corridor, the contribution rate will return to the normal cost rate, plus expense rate, plus amortization of post-2001 changes.

#### **Actuarial Value of Assets**

For purposes of determining the County contribution to the System, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.

In determining the actuarial value of assets, we calculate an expected actuarial value based on cash flow for the year and imputed returns at the actuarial assumption. This expected value is compared to the market value and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

#### **Changes Since Last Valuation**

There have been no changes since the last valuation to the Funding Method or Actuarial Value of Assets.

# Long Term Assumptions Used to Determine System Costs and Liabilities Demographic Assumptions Mortality

Annual Deaths Per 10,000 Members RP-2000 Mortality Projected to 2015*				
<u>Age</u>	<u>Male</u>	<u>Female</u>		
20	3	2		
25	3	2		
30	4	2		
35	7	4		
40	10	6		
45	12	9		
50	16	13		
55	27	24		
60	53	47		
65	103	90		
70	177	155		
75	306	249		
80	554	413		
85	997	708		
90	1,727	1,259		
95	2,596	1,888		
100	3,394	2,339		
105	3,979	2,931		

<sup>\* 5%</sup> of deaths are assumed to be service-connected.

Annual Deaths Per 10,000 Disabled Members RP-2000 Mortality Project to 2015 with Ages Set Forward 5 Years			
<u>Age</u>	<u>Male</u>	<u>Female</u>	
40	12	9	
45	16	13	
50	27	24	
55	53	47	
60	103	90	
65	177	155	
70	306	249	
75	554	413	
80	997	708	

Termination of Employment (Prior to Normal Retirement Eligibility)

Annual Terminations Per 1,000 Members				
<u>Service</u>	<u>Sheriffs</u>	<u>Non-Sheriffs</u>		
0	135	120		
5	43	18		
10	10	8		
15	5	5		
20	5	5		
25	5	5		

It is assumed that members who terminate before normal or early retirement age elect to receive a refund of contributions instead of vested benefits.

**Disability** 

Annual Disabilitie <u>Age</u>	s Per 1,000 Members* <u>Male and Female</u>
20	1
25	2
30	2
35	3
40	4
45	7
50	11
55	16
60	16

<sup>\*</sup> Disabilities are assumed to be all service-connected. Of these, 30% are assumed to receive Social Security benefits and 38% are assumed to receive Workers' Compensation benefits.

#### Retirement

Annual Retirement Per 1,000 Eligible*				
Age	Less than 24 years of Service	Greater than 23 years of Service		
Less than 55	0	350		
55-64	350	350		
65 and Older	1,000	1,000		

<sup>\* 75%</sup> are assumed to DROP.

Merit/Seniority Salary Increase (In Addition to Across-the-Board Increase)

Year of Service	Merit/Seniority Increase*
0	8.0%
5	5.0%
10	1.5%
15	3.0%
20	1.8%
25	1.8%
30	1.8%

<sup>\*</sup> There is a spike of 3.5% at 19 years of service.

## **Family Composition**

For purposes of valuing the pre-retirement death benefit, an assumption is made concerning how many employees are married. The assumption used in this valuation is that 80% of employees are married at death while active and that the female spouse is three years younger than the male spouse.

#### **Sick Leave Credit**

Unused sick leave balances as reported for each active member will be used as the unused sick leave balance throughout the remaining active period.

# **Economic Assumptions**

Investment Return: 7.50% compounded per annum.

Rate of General

Wage Increase: 3.00% compounded per annum.

Rate of Increase in

Cost-of-Living: 2.75% compounded per annum.\*

**Total Payroll Increase** 

(For Amortization): 3.00% compounded per annum.

Administrative Expenses: 0.25% of payroll.

\* Benefit increases are limited to 4% per year.

# **Changes Since Last Valuation**

There have been no changes since the last valuation to the Actuarial Assumptions.

# **Analysis of Financial Experience**

## Gain and Loss in Accrued Liability During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience

Type of Activity	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Investment Income	\$(8,352,154)	\$(103,521,233)	\$(52,003,538)	\$17,409,148	\$(19,330,917)	\$(3,805,385)
Combined Liability Experience	<u>1,986,816</u>	14,593,398	<u>5,509,116</u>	(13,747,922)	(1,456,752)	<u>24,088,845</u>
Gain (or Loss) During Year from Financial Experience	\$(6,365,338)	\$(88,927,835)	\$(46,494,422)	\$3,661,226	\$(20,787,669)	\$ 20,283,460
Non-Recurring Items	(2,027,721)	0	0	(2,808,343)	0	<u>(813,016)</u>
Composite Gain (or Loss) During Year	\$(8,393,059)	\$(88,927,835)	\$(46,494,422)	\$852,883	\$(20,787,669)	\$19,470,444

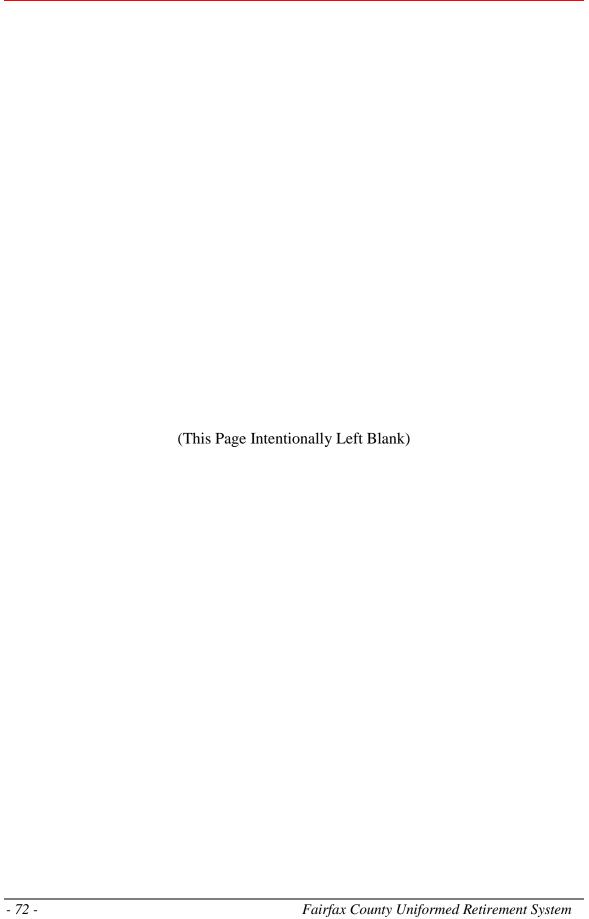
#### Schedule of Retirees and Beneficiaries Added To and Removed From Rolls

Year	Add	led to Rolls	Remov	ed From Rolls	On Ro	lls @ Yr. End	%	
Ended <u>June 30,</u>	<u>No.</u>	Annual <u>Allowance</u>	<u>No.</u>	Annual <u>Allowance</u>	<u>No.</u>	Annual <u>Allowance</u>	Increase <u>Allowance</u>	Average <u>Allowance</u>
2008	41	\$4,211,865	9	\$327,811	932	\$45,580,697	9.32%	\$48,906
2009	65	4,323,678	10	469,400	987	49,434,975	8.46%	50,086
2010	51	4,614,464	17	549,813	1,021	53,499,626	8.22%	52,399
2011	66	5,869,824	12	546,541	1,075	58,822,909	9.95%	54,719
2012	45	4,704,657	11	481,168	1,109	63,046,398	7.18%	56,850
2013	57	5,446,162	11	610,907	1,155	67,881,653	7.67%	58,772

# Solvency Tests Aggregate Accrued Liabilities For

Valuation Date	(1) Active Member	(2) Retirees, Vested Terms, Beneficiaries	(3) Active Members (Employer	Reported	]	on of Acc Liabilities eported A	S
July 1,	<u>Contributions</u>	& DROP	Financed Portion)	Assets *	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>
2008	100,789,409	693,098,403	491,806,439	1,097,994,261	100%	100%	62%
2009	108,449,048	745,549,680	497,205,327	1,074,229,685	100%	100%	44%
2010	113,757,792	813,049,990	500,808,928	1,095,079,616	100%	100%	34%
2011	120,040,592	896,003,321	510,174,331	1,185,593,678	100%	100%	33%
2012	120,373,016	981,922,550	511,358,566	1,247,526,438	100%	100%	28%
2013	130,979,546	1,042,085,650	503,200,502	1,326,424,772	100%	100%	30%

<sup>\*</sup> Based on the Actuarial Value of Assets



# **Statistical Section (unaudited)**

The Statistical Section presents historical information regarding the retirement plan. This information includes a ten-year analysis of the sources of change in plan net assets, benefit payments, the number of retired members and average monthly benefits. Sources of additions include employer and plan member contributions and net investment income; deductions include benefit payments to retirees and beneficiaries, refunds of employee contributions and administrative expenses. The amounts of benefits paid, the count of benefit recipients and the average benefit payments are provided by type of benefit, including service retirement annuities, service-connected and ordinary disability benefits and survivor benefits.

#### **Schedule of Additions by Source**

				Employer		
				Contributions	Net	
<b>Fiscal</b>	Plan Member	<b>Employer</b>		% of Covered	Investment	Total
<b>Year</b>	<b>Contributions</b>	<b>Contributions</b>	<b>Transfer</b>	<u>Payroll</u>	Income (loss)	<b>Additions</b>
2005	\$7,953,800	\$27,192,791		24.30%	\$78,696,049	\$113,842,640
2006	9,860,429	32,135,984	\$11,750,084	24.92%	88,814,121	142,560,618
2007	9,988,515	36,486,832		26.01%	167,240,928	213,716,275
2008	10,535,823	39,085,662		26.33%	(27,523,779)	22,097,706
2009	11,750,810	40,855,102		26.46%	(211,603,541)	(158,997,629)
2010	11,094,505	40,771,184		26.46%	131,320,268	183,185,957
2011	10,521,525	45,817,015		30.56%	238,039,247	294,377,787
2012	10,603,097	50,351,335		33.81%	(4,168,239)	56,786,193
2013	10,937,857	53,722,160		35.00%	120,417,604	185,077,621
2014	10,905,744	56,094,690		36.43%	210,256,032	277,256,466

The transfer in FY 2006 was a transfer of assets supporting the future benefits for the employees of the Department of Public Safety Communications who elected to leave the Employees' Retirement System and transfer to the Fairfax County Uniformed Retirement System.

#### **Schedule of Deductions by Type**

Fiscal	Benefit	Refunds of	Administrative	Total
<b>Year</b>	<b>Payments</b>	<b>Contributions</b>	<b>Expenses</b>	<b>Deductions</b>
2005	\$31,678,214	\$544,777	\$223,499	\$32,446,490
2006	36,023,777	349,572	223,842	36,597,191
2007	47,194,476	737,506	421,390	48,353,372
2008	47,544,913	833,454	440,564	48,818,931
2009	54,122,953	656,683	325,469	55,105,105
2010	58,356,915	597,955	345,766	59,300,636
2011	63,822,794	853,906	361,654	65,038,354
2012	67,361,605	599,188	372,770	68,333,563
2013	73,914,711	779,395	434,117	75,128,223
2014	78,358,943	557,938	433,541	79,350,422

# **Schedule of Benefit Payments by Type**

		Service-			
Fiscal	Service	Connected	Ordinary	Survivor	
<b>Year</b>	<b>Annuity</b>	<b>Disability</b>	<b>Disability</b>	<b>Benefit</b>	<b>Total</b>
2004	\$21,252,301	\$6,148,149	\$159,241	\$394,740	\$27,954,431
2005	24,716,535	6,242,349	291,306	428,024	31,678,214
2006	28,710,205	6,559,201	309,940	444,431	36,023,777
2007	39,729,752	6,669,085	309,674	485,965	47,194,476
2008	39,604,805	7,077,598	333,440	529,070	47,544,913
2009	45,854,076	7,323,730	343,405	601,742	54,122,953
2010	50,139,482	7,275,973	300,836	640,624	58,356,915
2011	55,344,665	7,513,492	317,253	647,384	63,822,794
2012	58,531,116	7,751,042	339,101	740,346	67,361,605
2013	64,917,112	7,771,437	341,271	884,891	73,914,711
2014	69,212,758	7,808,253	356,140	981,792	78,358,943

Please note, the following charts represent the same data as provided last year which is consistent with the underlying data used to determine the liability in both the financial and actuarial sections. Data for fiscal year 2014 will be updated next year.

# **Schedule of Retired Members by Benefit Type**

		Service-			
Fiscal	Service	Connected	Ordinary	Survivor	
<u>Year</u>	<b>Annuity</b>	<b>Disability</b>	<b>Disability</b>	<b>Benefit</b>	<b>Total</b>
2004	533	194	17	22	766
2005	569	193	17	20	799
2006	618	189	17	21	845
2007	672	190	17	21	900
2008	706	186	18	22	932
2009	758	187	18	24	987
2010	798	185	16	22	1,021
2011	845	186	18	26	1,075
2012	878	187	18	26	1,109
2013	925	185	17	29	1,156

#### **Schedule of Average Monthly Benefit Amounts**

Service-**Fiscal** Service Connected **Ordinary Survivor** Year **Annuity Disability Disability Benefit Average** 2004 \$3,529 \$2,684 \$1,442 \$1,735 \$3,217 2005 3,718 2,855 1,471 1,843 3,415 2006 3,827 2,942 1,518 1,909 3,535 2007 4,252 2,908 1,596 1,936 3,864 2008 4,434 3,199 1,606 1,997 4,076 2009 1,596 4,174 4,532 3,233 2,123 2010 4,726 3,339 1,505 2,045 4,367 2011 4,945 3,439 1,570 2,122 4,560 2012 5,127 3,571 1,614 2,122 4,737 2013 5,285 3,607 2,422 4,891 1,624

### **Schedule of Average Monthly Benefits by Years of Service**

Years of Credited Service *	2-4	5-9	10-14	15-19	20-24	25-29	30+
Period 7/1/2009 to 6/30/2010							
Average Monthly Benefit ** Average of Final Monthly	-	818	-	2,230	3,924	5,326	8,098
Salaries	-	4,293	-	5,798	8,113	8,047	9,781
Number of Retirees	-	1	-	3	7	31	8
Period 7/1/2010 to 6/30/2011							
Average Monthly Benefit ** Average of Final Monthly	477	1,980	1,944	2,527	4,331	5,381	6,873
Salaries	4,144	4,950	6,538	6,318	7,929	8,239	8,612
Number of Retirees	1	1	3	1	10	38	7
Period 7/1/2011 to 6/30/2012							
Average Monthly Benefit ** Average of Final Monthly	-	760	2,455	-	3,732	5,262	7,355
Salaries	-	4,321	6,137	-	7,510	8,205	9,284
Number of Retirees	-	2	1	-	3	30	6
Period 7/1/2012 to 6/30/2013							
Average Monthly Benefit ** Average of Final Monthly	458	-	2,188	3,155	4,343	5,871	7,410
Salaries	5,345	-	5,470	7,119	7,631	9,044	9,875
Number of Retirees	1	-	1	1	4	37	7

<sup>\*</sup> The Years of Credited Service is the service used in the determination of benefits, which may be different than service for eligibility.

<sup>\*\*</sup> Does not include supplements.







A Fairfax County, Va., publication



Fairfax County Retirement Systems 10680 Main Street, Suite 280, Fairfax, VA 22030