

**Comprehensive  
Annual  
Financial  
Report  
2012**



*Police Officers*

**RETIREMENT SYSTEM**



*For the Fiscal Year Ended June 30, 2012*

**A Pension Trust Fund of Fairfax County, Virginia**



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# County of Fairfax, Virginia

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

October 29, 2012

Dear Members of the Board of Trustees:

I am pleased to submit to you the annual report of the Fairfax County Police Officers Retirement System (System) for the fiscal year ended June 30, 2012. 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 Police Officers Retirement System was created under authority granted by Chapter 303 of the Acts of Assembly (law of the Commonwealth of Virginia) on March 29, 1944, to provide defined benefit pension plan coverage for sworn full-time law enforcement officers of the Fairfax County Police Department. In 1981 Fairfax County enacted Article 7 of the Fairfax County Code, which adopted and continued Chapter 303 as amended. There were 1,276 active members, 73 in the Deferred Retirement Option Program (DROP) and 876 retirees participating in the System as of June 30, 2012.

## 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

During fiscal year 2012, the economy continued its gradual recovery from the global financial crisis of 2008 and unemployment rates remained high. As a result, it proved to be an extremely difficult and volatile year for the equity markets, with a poor first quarter, followed by two strong quarters and then a pull back in the final quarter. Equity investments outside of



**Retirement Administration Agency**  
10680 Main Street \* Suite 280 \* Fairfax, VA 22030  
Phone: 703-279-8200 \* 1-800-333-1633 \* Fax: 703-273-3185  
<http://www.fairfaxcounty.gov/retirement/>

the U.S. were particularly disappointing in the face of the continuing economic crisis in Europe. The System's total portfolio was slightly negative with a return of -0.3% gross of fees (-0.6% after fees and expenses). This return was well below the long term target of 7.5% and also below the median public fund return of 1.1% and placed in the fourth quartile of the BNY Mellon universe of public funds. Investment returns for the three-year period were 14.9% per year, and placed in the 4<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 staff 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.

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 are expected to remain relatively level over time as a percentage of payroll, but will be adjusted as necessary to accumulate sufficient assets to meet the costs of benefit payments when due. The valuation of the System performed as of July 1, 2011, indicated that the ratio of assets accumulated by the System to total actuarial accrued liabilities for benefits showed an increase from 79.3% to 80.5%. The actuarial section contains further information on the results of the July 1, 2011, valuation.

Based on the July 1, 2011, actuarial valuation, the employer contribution rate for 2013 following the adopted corridor-based funding policy was 32.04%, an increase of 1.70% over the 2011 rate of 30.34%. This increase in the rate is required to amortize the increase in unfunded liability from FY 2011 actuarial experience. During establishment of the FY 2013 County budget, the Board of Supervisors adopted a higher contribution rate of 33.15%.

## **Major Initiatives**

At the request of the Board of Supervisors, a review of post-retirement benefits was conducted by an external consulting firm. The review confirmed that provision of a defined benefit retirement plan continues to be the best vehicle for attracting and retaining employees and for providing career employees with retirement benefits. The study recommended several modifications to plan provisions for new hires and the Board of Supervisors directed staff to implement those changes to be effective January 1, 2013. The Code change adopted in September, 2012 for new hires on or after January 1, 2013 limits the use of accumulated sick leave in determining length of service for retirement eligibility and in the calculation of benefits to a maximum of 2,080 hours.

On the investment front, significant steps were taken to further diversify risk by revising new strategic allocation targets that include a 30% allocation to balanced risk strategies, generally referred to as "risk parity". During the second quarter, investments were made in Bridgewater Associates All Weather fund, AQR's Global Risk Premium Fund and Blackrock's Market Advantage Fund. As part of this strategy change, equity allocations were reduced and the accounts with Goldman Sachs Asset Management, ClariVest Asset Management and Pzena Investment Management were closed. Another change to the external manager line-up involved the liquidation of the FrontPoint Partners multi-strategy fund.

## **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 Police Officers Retirement System for its comprehensive annual financial

report for the fiscal year ended June 30, 2011. This was the second 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 performs a yearly audit of the financial statements of the plan to ensure compliance with government accounting, auditing and financial reporting standards. Additionally, Cheiron performs 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 Police Officers Retirement System was prepared by the System's staff under the leadership of the Board of Trustees. I would like to thank the entire organization that has worked hard throughout the year to provide service to members and to ensure the successful operation of the System. 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 [www.fairfaxcounty.gov/retirement/](http://www.fairfaxcounty.gov/retirement/).

Respectfully submitted,



Robert L. Mears  
Executive Director

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

Fairfax County  
Police Officers Retirement System  
Virginia

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2011

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



*Linda C. Davidson*

President

*Jeffrey R. Emery*

Executive Director



**Board of Trustees**

**Captain John R. Piper**

*President*

Elected Member Trustee

*Term Expires: December 31, 2012*

**Sweeney (Aniello A.) De Santis**

*Vice President and Secretary*

Elected Member Trustee

*Term Expires: December 31, 2014*

**Victor L. Garcia**

*Treasurer*

Fairfax County Director of Finance

Ex officio Trustee

**James R. Dooley, Jr.**

Elected Retired Member Trustee

*Term Expires: June 30, 2014*

**Craig E. Dyson**

Board of Supervisors Appointee

*Term Expires: December 31, 2013*

**Brendan D. Harold**

Board of Supervisors Appointee

*Term Expires: December 31, 2014*

**Stephen K. Gallagher**

Board of Supervisors Appointee

*Term Expires: June 30, 2014*

**Administrative Organization**

**Administrative Staff**

Robert L. Mears  
*Executive Director*

Lauranz A. Swartz  
*Chief Investment Officer*

Jeffrey A. Willison  
*Senior Investment Manager*

John P. Sahn  
*Retirement Administrator*

**Professional Services**

**Actuary**

CHEIRON  
Actuaries  
McLean, VA

**Auditor**

KPMG LLP  
Certified Public Accountants  
Washington, DC

**Investment Managers**

Acadian Asset Management, LLC  
Boston, MA

AQR Capital Management, LLC  
Greenwich, CT

BlackRock, Inc.  
San Francisco, CA

BlueCrest Capital Management, LLP  
New York, NY

BNY Mellon Cash Investment Strategies  
Pittsburgh, PA

Bridgewater Associates, L.P.  
Westport, CT

The Clifton Group  
Edina, MN

Cohen & Steers Capital Management, Inc.  
New York, NY

Dodge & Cox Investment Managers  
San Francisco, CA

DoubleLine Capital, L.P.  
Los Angeles, CA

FrontPoint Partners, LLC  
Greenwich, CT

Gramercy Advisors, LLC  
Greenwich, CT

**Investment Managers**  
**(continued)**

Grantham, Mayo, Van Otterloo & Co.  
Boston, MA

King Street Capital Management, L.P.  
New York, NY

Loomis, Sayles & Company, L.P.  
Boston, MA

McKinley Capital Management, Inc.  
Anchorage, AK

MetWest Asset Management, LLC  
Los Angeles, CA

Oaktree Capital Management, L.P.  
Los Angeles, CA

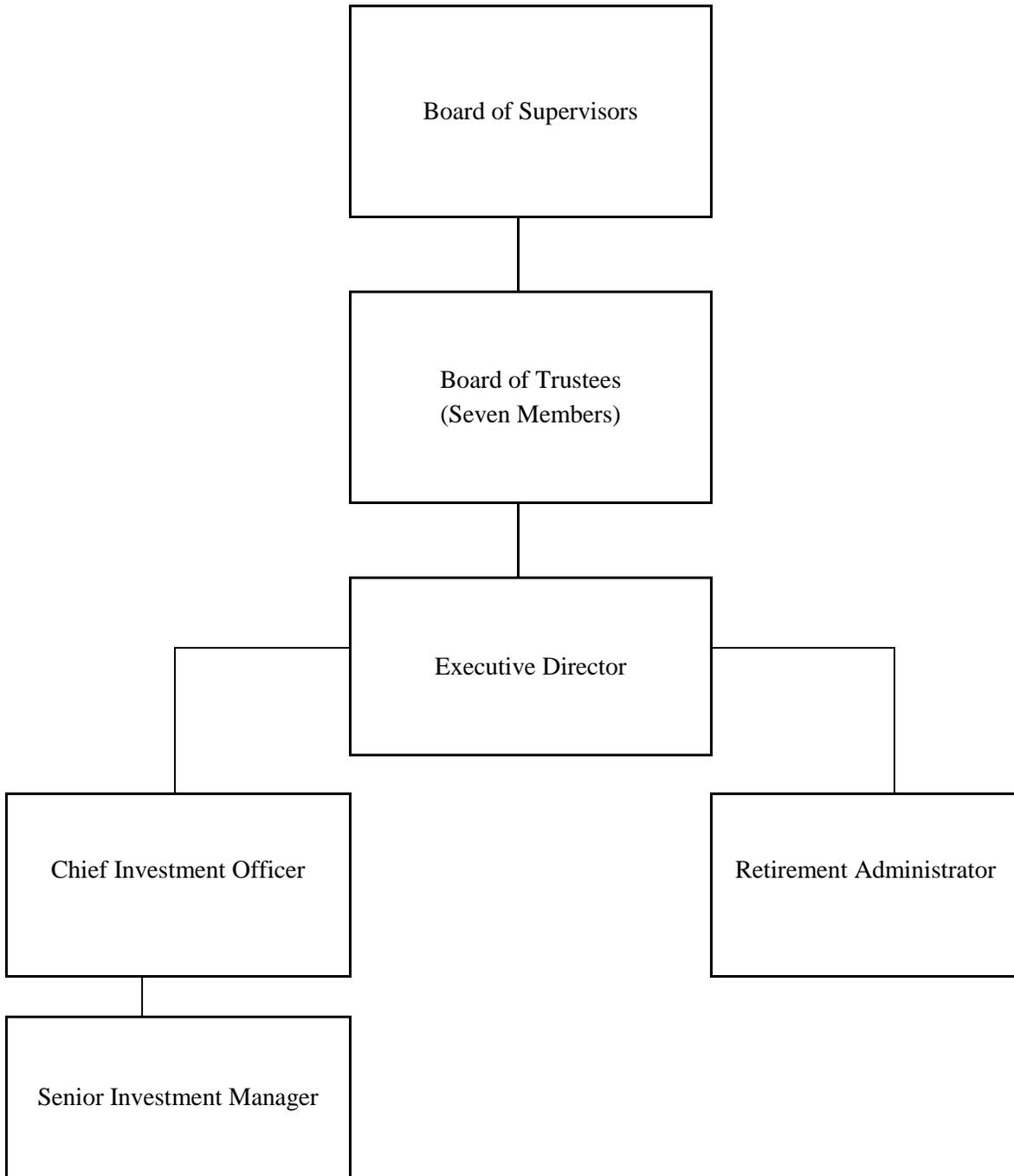
PIMCO  
Newport Beach, CA

Starboard Value and Opportunity, Ltd  
New York, NY

**Custodian Bank**

BNY Mellon Asset Servicing  
Pittsburgh, PA

**Organization Chart**



**Summary of Plan Provisions**

Membership in the Fairfax County Police Officers Retirement System includes full-time sworn law enforcement officers in the Fairfax County Police Department.

The general provisions of the Police Officers Retirement System are as follows.

**Contribution Rate:**

The member contribution rate is set by the County Ordinance and is currently 10% of base salary. The County contribution rate is set by the actuarial process and was 31.30% for fiscal year 2012. Police Officers do not participate in Social Security.

**Benefit:**

The benefit is 2.8% of average final compensation (highest consecutive three years) times creditable service. The total benefit is then increased by 3%.

**Benefit Limit:**

The benefit is 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 amount in excess of the Section 415 limit.

**Normal Retirement:**

Normal retirement occurs at either age 55 or at least 25 years of creditable service.

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

Those eligible for normal retirement may enter DROP for a period of 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.

**Early Retirement:**

A member is eligible for early retirement upon attaining at least 20 years of creditable service.

**Deferred Vested Retirement:**

Deferred vested retirement is available for vested members (vesting is at 5 years of service) who leave their contributions in the System when they terminate employment. At age 55, these members are entitled to their normal retirement benefit based on service with the Police Department.

**Service-Connected Disability Retirement:**

Service-connected disability retirement is available for members, regardless of their length of service, who become disabled as a result of a job-related illness or injury. Benefits for total disability are 66⅔% of the salary. These benefits continue during the existence of the disability.

**Non-Service Connected Disability Retirement:**

Non-service connected 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:* An automatic monthly benefit is payable to the member's spouse and children. This benefit equals \$2,126.96 for the spouse or surviving handicapped child (if there is no spouse), plus each eligible child receives \$850.78 up to a total family benefit of \$4,253.91 (these benefits are indexed to inflation). If the death occurred in the line of duty, the spouse or surviving handicapped child (if there is no spouse) may elect to receive 66 $\frac{2}{3}$ % of the member's regular salary at the time of death in lieu of the automatic benefits.

*If death occurs after retirement:* In addition to the automatic benefit detailed above, at the time the member retires, the plan provides for the member to elect survivor benefit options for the Surviving Spouse or a Handicapped Child at 100%, 66 2/3% or 50% of the retiree's benefit.

**Cost of Living Benefit:**

Annual cost of living adjustments are provided to retirees and beneficiaries and are equal to the lesser of 4% or the percentage increase in the Consumer Price Index for the Metropolitan Statistical Area that includes Fairfax County.

**Note:** Detailed provisions may be found in the Employee Handbook:  
<http://www.fairfaxcounty.gov/retirement/pdfs/policehandbook.pdf>



**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 Police Officers Retirement System

We have audited the Statement of Plan Net Assets of the Fairfax County Police Officers Retirement System (the System), a pension trust fund of the County of Fairfax, Virginia as of June 30, 2012, and the related Statement of Changes in Plan Net Assets for the year then ended. These basic financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these basic 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 basic financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the basic financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the Plan Net Assets of the System as of June 30, 2012, and the Changes in Plan Net Assets for the year then ended in conformity with U.S. generally accepted accounting principles.

Management's Discussion and Analysis on pages 9 to 11 is not a required part of the basic financial statements, but is supplementary information required by U.S. generally accepted accounting principles. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information on page 21. However, we did not audit the information and express no opinion on it.

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



Our audit was conducted for the purpose of forming an opinion on the System's basic financial statements. The supplementary information presented on page 22 is for the purpose of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and is derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied by us 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 financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Our audit was conducted for the purpose of forming an opinion on the System's basic financial statements. The introductory, investment, actuarial and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. The information in these sections has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on it.

*KPMG LLP*

October 25, 2012

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

This section presents management's discussion and analysis of the Fairfax County Police Officers Retirement System's ("System" or "Plan") financial performance and provides an overview of the financial activities for the fiscal year ended June 30, 2012. 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 Plan Net Assets and Statement of Changes in Plan Net Assets as of June 30, 2012. 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 and related notes provide information regarding the System's funding progress, employer contributions and administrative expenses. The Required Supplementary Information and related notes are immediately following the Notes to Financial Statements.

### **Financial Analysis**

**Plan Net Assets.** For fiscal year 2012 the assets of the Police Officers' Retirement System decreased 1.7%, resulting in a total net asset value of \$1.02 billion, reflecting a decrease of \$17.7 million from fiscal year 2011. The reduction in assets was due to benefit payments and expenses exceeding current year contributions by \$11 million and investment losses of \$6.7 million.

The actuarial value of the assets as of the last valuation on June 30, 2011, was \$982.2 million while actuarial liabilities as of the same period were \$1.2 billion. This resulted in a funded ratio of 80.5%.

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 FY12 increased by 8.7% due to an increase in the employer contribution rate from 28.31% to 31.30% of salary. Investment returns were lower for FY12 reflecting lower returns in the capital markets. Benefit payments increased due to a cost-of-living increase of 3%, an increase in the number of retirees and higher benefits for new retirees. Refunds of contributions declined as a result of lower employee turnover.

***Financial Section***

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The following table details the Police Officers System's fund balances for the current and prior fiscal year:

| Fiscal Year | Ending Balances<br>(millions) | Net Change in Dollars<br>(millions) | Net Change in Percent |
|-------------|-------------------------------|-------------------------------------|-----------------------|
| 2011        | \$1,035                       | \$199.1                             | 23.8                  |
| 2012        | \$1,017                       | (\$17.7)                            | (1.7)                 |

**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/](http://www.fairfaxcounty.gov/retirement/)

**Summary Statement of Plan Net Assets**

| <b>Assets</b>                   | <b>2012</b>                   | <b>2011</b>                   | <b>Difference</b>            |
|---------------------------------|-------------------------------|-------------------------------|------------------------------|
| Total cash and investments      | \$1,020,508,872               | \$1,075,170,533               | (\$54,661,661)               |
| Total fixed assets              | 1,359                         | ---                           | 1,359                        |
| Total receivables               | <u>8,762,430</u>              | <u>12,514,340</u>             | <u>(3,751,910)</u>           |
| <b>Total assets</b>             | 1,029,272,661                 | 1,087,684,873                 | (58,412,212)                 |
| <b>Total liabilities</b>        | 11,821,431                    | 52,538,912                    | <u>(40,717,481)</u>          |
| <b>Net assets held in trust</b> | <u><b>\$1,017,451,230</b></u> | <u><b>\$1,035,145,961</b></u> | <u><b>(\$17,694,731)</b></u> |

**Summary of Additions and Deductions**

| <b>Additions</b>               | <b>2012</b>                  | <b>2011</b>                 | <b>Difference</b>             |
|--------------------------------|------------------------------|-----------------------------|-------------------------------|
| Contributions                  |                              |                             |                               |
| Employer                       | \$31,700,690                 | \$29,174,611                | \$2,526,079                   |
| Plan Members                   | 10,109,068                   | 10,142,459                  | (33,391)                      |
| Total investment (loss)/income | <u>(6,731,294)</u>           | <u>210,054,206</u>          | <u>(216,785,500)</u>          |
| <b>Total Additions</b>         | 35,078,464                   | 249,371,276                 | (214,292,812)                 |
| <b>Deductions</b>              |                              |                             |                               |
| Benefit payments               | 52,043,157                   | 49,429,119                  | 2,614,038                     |
| Refunds                        | 357,901                      | 466,363                     | (108,462)                     |
| Administrative expense         | <u>372,137</u>               | <u>362,889</u>              | <u>9,248</u>                  |
| <b>Total deductions</b>        | <u>52,773,195</u>            | <u>50,258,371</u>           | <u>2,514,824</u>              |
| <b>Net increase/(decrease)</b> | <u><b>(\$17,694,731)</b></u> | <u><b>\$199,112,905</b></u> | <u><b>(\$216,807,636)</b></u> |

**Statement of Plan Net Assets**

As of June 30, 2012

**Assets**

|  |                    |                               |
|--|--------------------|-------------------------------|
| Cash and short-term investments                          |                    |                               |
| Equity in County's pooled cash and temporary investments | \$2,622,955        |                               |
| Cash collateral received for securities on loan          | 5,439,154          |                               |
| Short-term investments                                   | <u>24,038,761</u>  |                               |
| Total cash and short-term investments                    |                    | \$32,100,870                  |
| Fixed Assets   |                    |                               |
| Equipment  | <u>1,359</u>       |                               |
| Total fixed assets                                       |                    | 1,359                         |
| Receivables  |                    |                               |
| Accounts receivable                                      | 1,627,449          |                               |
| Accrued interest and dividends                           | 2,419,737          |                               |
| Securities sold  | <u>4,715,244</u>   |                               |
| Total receivables  |                    | 8,762,430                     |
| Investments, at fair value                               |                    |                               |
| Common and preferred stock                               | 89,179,070         |                               |
| Fixed income   |                    |                               |
| Asset-backed securities                                  | 82,627,172         |                               |
| Corporate and other bonds                                | 86,664,584         |                               |
| U.S. Government obligations                              | 39,567,050         |                               |
| Pooled and mutual funds                                  | <u>690,370,126</u> |                               |
| Total investments  |                    | <u>988,408,002</u>            |
| Total assets   |                    | 1,029,272,661                 |
| <b>Liabilities</b>                                       |                    |                               |
| Purchase of investments                                  | 4,862,799          |                               |
| Cash collateral received for securities on loan          | 5,439,154          |                               |
| Accounts payable and accrued expenses                    | <u>1,519,478</u>   |                               |
| Total liabilities  |                    | <u>11,821,431</u>             |
| <b>Net assets held in trust for pension benefits</b>     |                    | <b><u>\$1,017,451,230</u></b> |

See accompanying notes to financial statements.

**Statement of Changes in Plan Net Assets**  
For the Year Ended June 30, 2012

**Additions**

|   |                    |                        |
|---|--------------------|------------------------|
| Contributions                                 |                    |                        |
| Employer                                      | \$31,700,690       |                        |
| Plan members                                  | <u>10,109,068</u>  |                        |
| Total contributions                           |                    | \$ 41,809,758          |
| Investment income from investment activities  |                    |                        |
| Net depreciation in fair value of investments | (28,163,515)       |                        |
| Interest                                      | 17,188,920         |                        |
| Dividends                                     | <u>7,128,221</u>   |                        |
| Total investment expense                      | (3,846,374)        |                        |
| Investment activity expense                   |                    |                        |
| Management fees                               | (2,666,034)        |                        |
| Custodial fees                                | (104,000)          |                        |
| Allocated administration expense              | <u>(168,447)</u>   |                        |
| Total investment expense                      | <u>(2,938,481)</u> |                        |
| Net loss from investment activities           |                    | (6,784,855)            |
| Securities lending activities                 |                    |                        |
| Securities lending income                     | 76,730             |                        |
| Securities lending expenses                   | <u>(23,169)</u>    |                        |
| Net income from securities lending activities |                    | <u>53,561</u>          |
| <br>Total net investment loss                 |                    | <br><u>(6,731,294)</u> |
| Total additions                               |                    | 35,078,464             |

**Deductions**

|                                   |                |                   |
|-----------------------------------|----------------|-------------------|
| Annuity benefits                  | 47,757,201     |                   |
| Disability benefits               | 1,329,912      |                   |
| Survivor benefits                 | 2,956,044      |                   |
| Refunds of employee contributions | 357,901        |                   |
| Administrative expense            | <u>372,137</u> |                   |
| Total deductions                  |                | <u>52,773,195</u> |
| Net decrease                      |                | (17,694,731)      |

|   |  |                               |
|---|--|-------------------------------|
| Net assets held in trust for pension benefits |  |                               |
| Beginning of fiscal year                      |  | <u>1,035,145,961</u>          |
| <b>End of fiscal year</b>                     |  | <b><u>\$1,017,451,230</u></b> |

See accompanying notes to financial statements.

## **Notes to the Financial Statements**

As of and For the year ended June 30, 2012

The Fairfax County Police Officers Retirement “System” is a legally separate single-employer defined benefit pension plan established under the Code of Virginia to provide defined pension benefits to certain Fairfax County, Virginia (“County”) police. As such, the System is considered part of the 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 Statement of Plan Net Assets. 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.

*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, 2012, 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 changes could materially affect the amounts reported in the financial statements.

**B. Plan Description, Contribution Information, Plan’s Funded Status Information, and Actuarial Methods and Assumptions**

*Membership.* At July 1, 2011, the date of the latest actuarial valuation, membership in the System consisted of:

|  |                     |
|--|---------------------|
| Retirees and beneficiaries receiving benefits                      | 850                 |
| Terminated plan members entitled to but not yet receiving benefits | 34                  |
| Deferred Retirement Option Program (DROP) participants             | 59                  |
| Active plan members  | <u>1,293</u>        |
| <b>Total</b>   | <b><u>2,236</u></b> |

*Plan Description.* The System is a single-employer defined benefit pension plan. The plan covers County police officers 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) if employed before July 1, 1981; attained the age of 55 or completed 20 years of service, or (b) if employed on or after July 1, 1981; attained the age of 55 or completed 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. Members eligible for normal retirement have the option of participating in a deferred retirement option program (DROP). Participating members continue working up to an additional three years after eligibility for normal retirement. In lieu of continuing to earn service credit, DROP members accrue a lump sum benefit payable at retirement. To be eligible for early retirement, the employee must have 20 years of service (does not apply if hired before July 1, 1981). Benefits are determined based on the normal retirement benefit calculated using average final compensation and service at early retirement actuarially reduced.

Annual cost-of-living adjustments are provided to retirees and beneficiaries equal to the lesser of 4 percent or the percentage increase in the Consumer Price Index for the Washington Consolidated Metropolitan Statistical Area.

*Contributions.* The contribution requirements of the System’s members are established and may be amended by County ordinances. Member contributions are based on 10 percent of compensation. The County is required to contribute at an actuarially determined rate; the rate for the year ended June 30, 2012, was 30.34% of annual covered payroll. The decision was made to commit additional funding and a rate of 31.30% was adopted for fiscal year 2012.

*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.

***Financial Section***

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*Plan's Funded Status Information.* The actuarial valuation performed as of July 1, 2011, showed the System's funded status at 80.5%, an increase of 1.2 percentage points from the July 1, 2010, funded percentage of 79.3%. The table below displays the actuarial value of assets, the actuarial accrued liability, the total unfunded actuarial accrued liability, the actuarial value of assets as a percentage of the actuarial accrued liability (funded ratio), the annual covered payroll, and the ratio of the unfunded actuarial liability to annual covered payroll.

| <b>Actuarial<br/>Validation<br/>Date</b> | <b>Actuarial<br/>Value of<br/>Assets</b> | <b>Actuarial<br/>Accrued<br/>Liability</b> | <b>Unfunded<br/>Actuarial<br/>Liability</b> | <b>Funded<br/>Ratio</b> | <b>Covered<br/>Payroll</b> | <b>Unfunded<br/>Percent of<br/>Covered<br/>Payroll</b> |
|--|--|--|---|-------------------------|----------------------------|--|
|  | <b>(a)</b>                               | <b>(b)</b>                                 | <b>(b-a)</b>                                | <b>(a/b)</b>            | <b>(c)</b>                 | <b>((b-a)/c)</b>                                       |
| 7/1/2011                                 | \$982,153,681                            | \$1,219,609,107                            | \$237,455,426                               | 80.5%                   | \$99,070,327               | 239.7%   |

The required schedule of funding progress, which presents multiyear trend information, is reported immediately following the Notes to Financial Statements.

*Actuarial Methods and Assumptions Information.*

|                               |                                |
|-------------------------------|--------------------------------|
| Valuation date                | July 1, 2011                   |
| Actuarial cost method         | Entry Age                      |
| Amortization method           | Level percent open             |
| Remaining amortization period | 15 years                       |
| Asset valuation method        | 3-year smoothed market         |
| Actuarial assumptions:        |                                |
| Investment rate of return *   | 7.5%                           |
| Projected salary increases *  | 4.8% - 11.0%                   |
| * Includes inflation at       | 1.0% in 2012, 3.0% thereafter  |
| Cost of living adjustments    | 1.0% in 2012, 2.75% thereafter |

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.

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 the average 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 actuarial valuation performed as of July 1, 2011, in accordance with the GASB methodology resulted in a contribution rate of 42.00% for fiscal 2013, an increase of 3.09 percentage points over the fiscal 2012 rate of 38.91%. Beginning with fiscal 2003, the funding policy was revised to

further stabilize the contribution rate. The methodology now in place sets the employer contribution rate equal to the normal cost and allowance for administrative expense. Amortization of the unfunded liability is included in the contribution rate only for any benefit and actuarial assumption changes or if the actuarial funding ratio falls outside a corridor of 90% and 120%. Use of the corridor method, with adjustments for plan changes effective after the valuation date, resulted in a rate of 32.04% for fiscal year 2013. The decision was made to commit additional funding for fiscal year 2013 and a rate of 33.15% was adopted, an increase of 1.85% over the fiscal year 2012 adopted rate of 31.30%.

### **C. Investments**

The authority to establish the System is set forth in Chapter 303 of the Acts of Assembly (law of the Commonwealth of Virginia). Section 26-45.1 of the *Code of Virginia* (Code), and updated by Section 51.1-803 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.*

The System's Board of Trustees has adopted a Statement of Investment Objectives and Policy which establishes a broad set of investment objectives, guidelines, risk tolerance and performance standards for the assets of the System. While the System is not subject to the provisions of the Employee Retirement Income Security Act (ERISA), the Board has elected to incorporate the standards of ERISA in the System's Statement of Investment Objectives and Policy. The Board recognizes that investing in worldwide capital markets inherently entails the assumption of risk. The Board believes that part of the risk involved in managing the System's assets can be reduced by investing in diversified, lowly-correlated asset classes and employing different philosophies and investment management styles. The Board has selected a long-term strategic asset allocation strategy which provides a high degree of diversification, maintains appropriate asset coverage of plan liabilities, and also optimizes investment return. Investment decisions for these assets are made by the Board of Trustees or investment managers selected by the Board. The Board hires each of its investment advisory firms on the basis of its specific area of expertise as well as its fit with the total risk and return objectives of the System. Each manager exercises investment discretion around specifically mandated quality, concentration, benchmark and performance guidelines, and practices active risk controls in order to achieve the System's investment expectations.

For the most part, the overall investment policy does not identify a specific level of credit risk, interest rate risk or foreign currency risk. That is addressed at the individual account level. The guideline for "concentration of risk" is system-wide, however. The System does not hold investments (other than U.S. Government and U.S. Government-guaranteed obligations) in any one organization that represents 5 percent or more of net assets 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 and the custodian provides insurance for all custodied assets.

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 lower of the two ratings is used for the purposes of meeting minimum quality standards.

The System’s investment quality ratings at June 30, 2012, were as follows:

| <b>Type of Investment</b>     | <b>Fair Value</b>           | <b>Ratings</b>   | <b>Percent of Fixed</b> |             |
|-------------------------------|-----------------------------|------------------|-------------------------|-------------|
| U. S. Government obligations  | \$39,567,050                | AA               | 18.9%                   |             |
| Corporate & other bonds       | 2,217,484                   | AA               | 1.1%                    |             |
|                               | 15,460,237                  | A                | 7.4%                    |             |
|                               | 20,531,533                  | BBB              | 9.8%                    |             |
|                               | 12,563,953                  | BB               | 6.0%                    |             |
|                               | 18,016,259                  | B                | 8.6%                    |             |
|                               | 6,535,855                   | CCC              | 3.1%                    |             |
|                               | 632,075                     | D                | 0.3%                    |             |
|                               | 10,707,188                  | Unrated          | 5.1%                    |             |
|                               | Asset- backed securities    | 3,380,128        | AAA                     | 1.6%        |
|                               |                             | 48,539,488       | AA                      | 23.3%       |
| 2,146,462                     |                             | A                | 1.0%                    |             |
| 92,305                        |                             | BBB              | 0.1%                    |             |
| 1,527,661                     |                             | BB               | 0.7%                    |             |
| 1,250,249                     |                             | B                | 0.6%                    |             |
| 10,086,804                    |                             | CCC              | 4.8%                    |             |
| 2,208,318                     |                             | CC               | 1.1%                    |             |
| 7,625,345                     |                             | D                | 3.7%                    |             |
|                               |                             | <u>5,770,412</u> | <u>Unrated</u>          | <u>2.8%</u> |
| <b>Total fixed income</b>     | <b><u>\$208,858,806</u></b> | <b>BBB</b>       | <b>100.0%</b>           |             |
| <b>Short-term investments</b> | <b><u>\$24,038,761</u></b>  | Unrated          |                         |             |

As of June 30, 2012, the fixed income portfolio exhibited an overall credit quality rating of “BBB”, and approximately 28.9% of the portfolio was invested in securities rated below-investment-grade. This overall rating reflects the change in credit rating of U.S. Government Obligations to “AA”.

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, 2012, follows:

| <b>Investment Type</b>        | <b>Fair Value</b>           | <b>Option -<br/>Adjusted<br/>Durations (yrs)</b> | <b>Percentage<br/>of<br/>Fixed</b> |
|-------------------------------|-----------------------------|--|------------------------------------|
| U.S. Government obligations   | \$39,567,050                | 6.8  | 18.9%                              |
| Corporate and other bonds     | 86,664,584                  | 5.6  | 41.5%                              |
| Asset-backed securities       | <u>82,627,172</u>           | <u>3.2</u>                                       | <u>39.6%</u>                       |
| <b>Total fixed income</b>     | <b><u>\$208,858,806</u></b> | <b><u>4.9</u></b>                                | <b><u>100.00%</u></b>              |
| <b>Short-term investments</b> | <b><u>\$24,038,761</u></b>  | <b><u>0.1</u></b>                                |                                    |

As of June 30, 2012, the System's overall fixed income portfolio option-adjusted duration was 4.9 years compared with the 5.1 duration of the BCAG.

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, 2012, held in currencies other than U.S. dollars were as follows:

| <b>International Securities</b> | <b>Short Term<br/>Investments &amp;<br/>Other</b> | <b>EQUITY</b>              | <b>Convertible<br/>and Fixed<br/>Income</b> | <b>Total</b>               |
|---------------------------------|---|----------------------------|---|----------------------------|
| Euro Currency Unit              | \$18,136  | \$10,526,037               | \$1,706,146                                 | \$12,250,319               |
| British Pound Sterling          | ---   | 10,916,117                 | 225,485                                     | 11,141,602                 |
| Hong Kong Dollar                | 18,813  | 10,162,887                 | ---   | 10,181,700                 |
| Japanese Yen                    | 52,195  | 8,505,829                  | ---   | 8,558,024                  |
| Australian Dollar               | 10  | 4,093,172                  | 639,363                                     | 4,732,545                  |
| Canadian Dollar                 | 5,689   | 2,469,341                  | 236,206                                     | 2,711,236                  |
| Brazil Real                     | ---   | 460,110                    | 1,830,561                                   | 2,290,671                  |
| Singapore Dollar                | ---   | 2,269,261                  | ---   | 2,269,261                  |
| Philippines Peso                | ---   | 422,767                    | 1,837,778                                   | 2,260,545                  |
| South Koran Won                 | ---   | 1,918,014                  | ---   | 1,918,014                  |
| Swiss Franc                     | 31,679  | 1,875,721                  | ---   | 1,907,400                  |
| Mexican New Peso                | ---   | 101,956                    | 1,723,813                                   | 1,825,769                  |
| Thailand Baht                   | ---   | 1,216,897                  | ---   | 1,216,897                  |
| Swedish Krona                   | ---   | 1,020,388                  | ---   | 1,020,388                  |
| Other Currencies                | <u>4</u>  | <u>1,437,909</u>           | <u>380,326</u>                              | <u>1,818,239</u>           |
| <b>Total International</b>      | <b><u>\$126,526</u></b>                           | <b><u>\$57,396,406</u></b> | <b><u>\$8,579,678</u></b>                   | <b><u>\$66,102,610</u></b> |

*Derivative Financial Instruments.* In accordance with the Board's investment policies, the System may invest in derivative financial instruments with off-balance-sheet risk in the normal course of its investing activities to manage exposure to certain risks and to gain exposure to currencies and markets where derivatives are the most cost-effective instrument. During fiscal 2012, the System invested directly in various derivatives. Investment managers are prohibited from purchasing securities on margin or using leverage unless specifically permitted within the investment manager's guidelines. These investments generally contain market risk resulting from fluctuations in interest and currency rates. The credit risk of these investments is associated with

## Financial Section

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. The Board's investment policy seeks to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. In addition, the System has indirect exposure to market and credit risk through its ownership interests in certain mutual and commingled funds which may use, hold or write derivative financial instruments.

As permitted by the Board's policies, the System holds off-financial statement derivatives. As of June 30, 2012, the system held S&P 500 futures with a net exposure of \$85.4 million. Gains and losses on derivative securities are determined based upon fair values and recorded in the Statement of Change in Plan Net Assets.

*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.

The following represents the balances relating to the securities lending transactions at June 30, 2012.

|                                | <b>Underlying<br/>Securities</b> | <b>Cash Collateral<br/>Investment Value</b> | <b>Securities Collateral<br/>Investment Value</b> |
|--------------------------------|----------------------------------|---|---|
| <b>Securities Lent</b>         |                                  |   |   |
| Lent for cash collateral       |                                  |   |   |
| Common and preferred stock     | \$4,952,542                      | \$5,439,154                                 | ---   |
| Lent for securities collateral |                                  |   |   |
| US Government securities       | 8,139,466                        | ---   | \$8,308,182                                       |
| Corporate and other bonds      | <u>9,344,368</u>                 | <u>---</u>                                  | <u>10,422,420</u>                                 |
| <b>Total</b>                   | <b><u>\$22,436,376</u></b>       | <b><u>\$5,439,154</u></b>                   | <b><u>\$18,730,602</u></b>                        |

The System did not impose any restrictions during fiscal 2012 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.

All securities loans can be terminated on demand by either the system or the borrower. Cash collateral is invested in the lending agent's collective collateral investment pool which at June 30, 2012 had a weighted-average maturity of 4 days.

### **D. Income Taxes**

The Internal Revenue Service issued a determination letter on November 24, 2003, 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)

Ten-year historical trend information about the System is presented here as required supplementary information. This information is intended to help users assess the System's funding status on a going-concern basis, assess progress made in accumulating assets to pay benefits when due and make comparisons with other public employee retirement systems.

#### Schedule of Funding Progress (in thousands)

| Date     | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability<br>(b) | Unfunded<br>Liability<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | Unfunded %<br>of Covered<br>Payroll<br>((b-a)/c) |
|----------|--|--|--------------------------------|--------------------------|---------------------------|--|
| 7/1/2002 | 618,383                                | 656,615                                  | 38,232                         | 94.2%                    | 69,197                    | 55.3%  |
| 7/1/2003 | 644,405                                | 703,977                                  | 59,572                         | 91.5%                    | 71,401                    | 83.4%  |
| 7/1/2004 | 685,495                                | 749,344                                  | 63,849                         | 91.5%                    | 78,080                    | 81.8%  |
| 7/1/2005 | 732,582                                | 828,702                                  | 96,120                         | 88.4%                    | 83,939                    | 114.5%   |
| 7/1/2006 | 788,766                                | 897,478                                  | 108,712                        | 87.9%                    | 89,062                    | 122.1%   |
| 7/1/2007 | 870,975                                | 968,735                                  | 97,760                         | 89.9%                    | 95,904                    | 101.9%   |
| 7/1/2008 | 908,077                                | 1,031,333                                | 123,256                        | 88.0%                    | 99,714                    | 123.6%   |
| 7/1/2009 | 879,543                                | 1,076,039                                | 196,496                        | 81.7%                    | 99,647                    | 197.2%   |
| 7/1/2010 | 899,543                                | 1,135,015                                | 235,472                        | 79.3%                    | 100,500                   | 234.3%   |
| 7/1/2011 | 982,154                                | 1,219,609                                | 237,455                        | 80.5%                    | 99,070                    | 239.7%   |

Analysis of the dollar amounts of plan net assets, actuarial accrued liability, and unfunded actuarial accrued liability in isolation can be misleading. Expressing plan net assets as a percentage of the actuarial accrued liability provides one indication of the System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system. Trends in the unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the system's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the System.

#### Schedule of Employer Contributions

| Fiscal Year<br>Ended June 30 | Annual Required<br>Contribution | Percentage<br>Contributed |
|------------------------------|---------------------------------|---------------------------|
| 2003                         | 14,918,405                      | 87%                       |
| 2004                         | 17,356,995                      | 85%                       |
| 2005                         | 20,744,793                      | 72%                       |
| 2006                         | 22,641,707                      | 74%                       |
| 2007                         | 26,518,550                      | 72%                       |
| 2008                         | 28,198,891                      | 76%                       |
| 2009                         | 27,625,460                      | 85%                       |
| 2010                         | 30,759,259                      | 77%                       |
| 2011                         | 36,872,751                      | 80%                       |
| 2012                         | 39,408,110                      | 81%                       |

## **Additional Supplementary Information**

### **Schedule of Administrative Expenses For the Year Ended June 30, 2012**

|  |               |                         |
|--|---------------|-------------------------|
| Personnel services                     |               |                         |
| Salaries and wages                     | \$199,406     |                         |
| Fringe benefits                        | <u>72,637</u> |                         |
| Total personnel services               |               | \$272,043               |
| Professional services                  |               |                         |
| Actuarial                              | 16,206        |                         |
| Audit                                  | <u>5,600</u>  |                         |
| Total professional services            |               | 21,806                  |
| Communications                         |               |                         |
| Phone charges                          | 2,504         |                         |
| Printing, binding and copying          | 2,717         |                         |
| Postage                                | <u>7,042</u>  |                         |
| Total communications                   |               | 12,263                  |
| Supplies                               |               |                         |
| Office supplies                        | <u>2,222</u>  |                         |
| Total supplies                         |               | 2,222                   |
| Other services and charges             |               |                         |
| Board and staff travel and development | 1,117         |                         |
| Professional memberships               | 223           |                         |
| Insurance                              | 6,023         |                         |
| Building rent                          | 17,109        |                         |
| Computer systems                       | 32,636        |                         |
| Other operating                        | <u>6,695</u>  |                         |
| Total other services and charges       |               | <u>63,803</u>           |
| <b>Total Administrative Expenses</b>   |               | <b><u>\$372,137</u></b> |

**Capital Markets and Economic Conditions (unaudited)**

**Fiscal Year 2012 Economic Environment**

The 2012 fiscal year ending June 30th proved to be an extremely difficult and volatile year for investors. The year was a “risk on/risk off” roller coaster ride driven largely by headline risks related to the European debt crisis and fears of a global slowdown, interspersed with hope for solutions and fundamental recovery. The fiscal year began with U.S. stocks selling off sharply as investors fretted about the debt limit debacle in Congress. International stocks suffered even worse declines than U.S. equities as investors fled from risk. The S&P 500 Index fell 13.8% in the fiscal first quarter, and international indices fell closer to 20%. U.S. stocks rallied in the second fiscal quarter, as domestic growth prospects improved and investors increasingly came to terms with the European sovereign debt crisis. U.S. equity markets continued to gain the advantage over non-U.S. stocks, and European markets lagged. In the third fiscal quarter of 2012, macro fears subsided and attention returned to improving fundamentals. In fact, the quarter proved to be the strongest quarter for equity returns over the fiscal year as U.S. stocks posted their strongest quarterly gain in more than 10 years and continued to outpace international and emerging markets. The final quarter of the fiscal year once again experienced the “risk off” environment similar to the start of the fiscal year. Greater political concerns in Europe, slowing GDP in China, and fears that Greek political parties would be unable to support the country’s austerity measures, all led to negative returns across equity markets for the final quarter of the fiscal year.

The broad domestic equity market, as measured by the S&P 500 Index, produced a 5.5% return for fiscal year 2012. The domestic bond market, as measured by the Barclays Aggregate Bond Index, returned 7.5% in fiscal year 2012, outperforming all equity indices. The global equity market, as measured by the MSCI All Country World Index (net), returned -5.0% in fiscal year 2012 relative to a 30.1% gain in fiscal 2011.

Treasury yields fell to remarkably low levels across the yield curve during the year, particularly at the long end, as The Fed’s “Operation Twist” drove long-term interest rates to historic lows. And for the first time since the 1950’s, the S&P 500 dividend yield was significantly higher than the yield on a 10- year Treasury; an example of the market re-valuing the premium applied to owning equities versus Treasuries, and a demand by investors to be significantly compensated for taking on more risk. The 30-year Treasury Bond Index led fixed-income returns over the fiscal year at 45.0%, followed by Corporate Bonds at 9.5%, High Yield bonds at 7.3%, and Mortgage bonds at 5.0%.

**Domestic Equity Markets**

U.S. equity markets struggled to keep pace with the extremely high returns of fiscal year 2011, but were able to produce positive returns for the one year period. Throughout the year, investors were cautious of risky assets and sought greater safety in their investments. Thus, large cap stocks outperformed small cap stocks by 7.6 percentage points as the S&P 500 Index returned 5.5% and the Russell 2000 returned -2.1%. Large cap growth outperformed large cap value, with the Russell 1000 Growth Index up 5.8% compared to 3.0% for the Russell 1000 Value. The reverse was true in smaller cap names as the Russell 2000 Value returned -1.4% as compared with the Russell 2000 Growth Index return of -2.7%.

### **International Markets**

The trend of “risk on/risk off” continued over the fiscal year and the European debt crisis, along with China’s slowing growth, were the main drivers of the international markets. International developed market equities as measured by the MSCI EAFE (net) Index (a broad index of the international developed market equities) returned -13.8% for the year ended June 30, 2012, as the European debt crisis continued to weigh on investor concerns. Emerging markets equities, as measured by the MSCI EM Index, returned -16.0%. However, the emerging market consumer fared far better than the MSCI EM index. The JPM EMBI Global Diversified Index, a key barometer for emerging market debt, returned 11.2% for the year. The Citigroup World Government Bond Index also posted a positive return at 2.7%.

### **Fixed Income Markets**

For the fiscal year, U.S. Fixed Income returns were very strong and outperformed the prior fiscal year. Throughout the year investors experienced a consistent trend of falling Treasury yields and a flattening of the yield curve. Long Treasuries returned 45.0% during the year, followed by credit at 9.5%. The Barclays Aggregate Bond Index returned 7.5%, beating out high yield bonds, 7.3%, and mortgage bonds, 5.0%, for the one-year period ended June 30, 2012. The 10-Year U.S. Treasury bond finished the fiscal year yielding 1.7%.

### **Police Officers System**

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

For fiscal 2012, investments provided a negative return of 0.32%, gross of fees (-0.6%, net of fees). The System’s annualized rates of return, gross of fees, were 14.9% (14.6%, net of fees) over the last three years and 3.4%, (3.0%, net of fees), over the last five years. These System returns ranked in the 85<sup>th</sup> percentile of The Bank of New York Mellon universe of public plans in 2012, in the 4<sup>th</sup> percentile for the latest 3-year period, and in the 16<sup>th</sup> percentile of public plans for the last 5 years.

During the past twelve months there were a few changes made to the manager lineup of the System. The System eliminated Goldman Sachs Asset Management, Pzena Investment Management, and ClariVest Asset Management from the domestic equities allocation. The System added the BlueCrest AllBlue Fund, AQR Global Risk Premium Fund, BlackRock Market Advantage Fund, and Bridgewater All Weather Fund to provide expanded diversification to the investment program.

**Investments by Category and Investment Manager**

June 30, 2012

| <i>Asset Class</i><br>Manager              | Investment Style                  | Total Assets           | % of Total<br>Net Assets |
|--|-----------------------------------|------------------------|--------------------------|
| <b><i>Domestic Equities</i></b>            |                                   |                        |                          |
| King Street Capital*                       | Enhanced S&P 500 Index            | \$43,918,319           | 4.3%                     |
| PIMCO StocksPlus PARS*                     | Enhanced S&P 500 Index            | 43,702,081             | 4.3%                     |
| Starboard Value and Opportunity*           | Small Cap Value Activist          | 27,214,116             | 2.7%                     |
| BlueCrest Capital Management*              | Enhanced S&P 500 Index            | 26,154,088             | 2.6%                     |
| AQR Capital Management*                    | Small Cap Core                    | 25,142,020             | 2.5%                     |
| The Clifton Group                          | S&P 500 Beta Manager              | 10,830,761             | 1.1%                     |
| FrontPoint Partners*                       | Enhanced S&P 500 Index            | 734,555                | 0.1%                     |
| <b><i>International Equities</i></b>       |                                   |                        |                          |
| Grantham, Mayo, Van Otterloo*              | Developed Markets Value           | 34,307,049             | 3.4%                     |
| McKinley Capital                           | Developed Markets Growth          | 33,085,930             | 3.3%                     |
| Acadian Asset Management*                  | Emerging Markets                  | 23,795,301             | 2.3%                     |
| Acadian Asset Management*                  | Developed Markets Small Cap       | 11,279,283             | 1.1%                     |
| <b><i>Fixed Income</i></b>                 |                                   |                        |                          |
| DoubleLine Capital                         | Mortgage-Backed Securities        | 72,885,514             | 7.2%                     |
| Loomis, Sayles & Company                   | High Yield Bonds                  | 59,162,137             | 5.8%                     |
| Dodge & Cox Investment Managers            | Domestic Core Bonds               | 56,246,008             | 5.5%                     |
| The Clifton Group                          | TIPS                              | 38,777,386             | 3.8%                     |
| Oaktree Capital Management*                | Convertible Bonds                 | 21,539,123             | 2.1%                     |
| <b><i>Real Estate</i></b>                  |                                   |                        |                          |
| Cohen & Steers Capital Management          | Global Real Estate Securities     | 56,282,744             | 5.5%                     |
| <b><i>Alternative Investments</i></b>      |                                   |                        |                          |
| Bridgewater Pure Alpha*                    | Global Macro Absolute Return Fund | 42,433,798             | 4.2%                     |
| BlueCrest Capital Management*              | Global Macro Absolute Return Fund | 27,035,019             | 2.7%                     |
| Gramercy*                                  | Emerging Markets Multi-Strategy   | 26,245,128             | 2.6%                     |
| Pacific Investment Management Co. (PIMCO)* | Distressed Senior Credit          | 23,538,243             | 2.3%                     |
| MetWest TALF Fund*                         | Distressed Opportunity            | 4,595,778              | 0.5%                     |
| <b><i>Balanced Portfolios</i></b>          |                                   |                        |                          |
| Bridgewater All Weather*                   | Risk Parity                       | 107,583,290            | 10.6%                    |
| AQR Global Risk Premium*                   | Risk Parity                       | 100,624,731            | 9.9%                     |
| Blackrock Market Advantage*                | Risk Parity                       | 95,190,195             | 9.4%                     |
| <b><i>Short-term</i></b>                   |                                   |                        |                          |
| Cash Held at County Treasurer              | Operating Cash Account            | 2,622,955              | 0.3%                     |
| BNY Mellon Cash Investment Strategies      | Plan Level Cash Accounts          | <u>2,412,710</u>       | <u>0.2%</u>              |
| <b>Total Investments</b>                   |                                   | <b>\$1,017,338,262</b> | <b>100.0%</b>            |

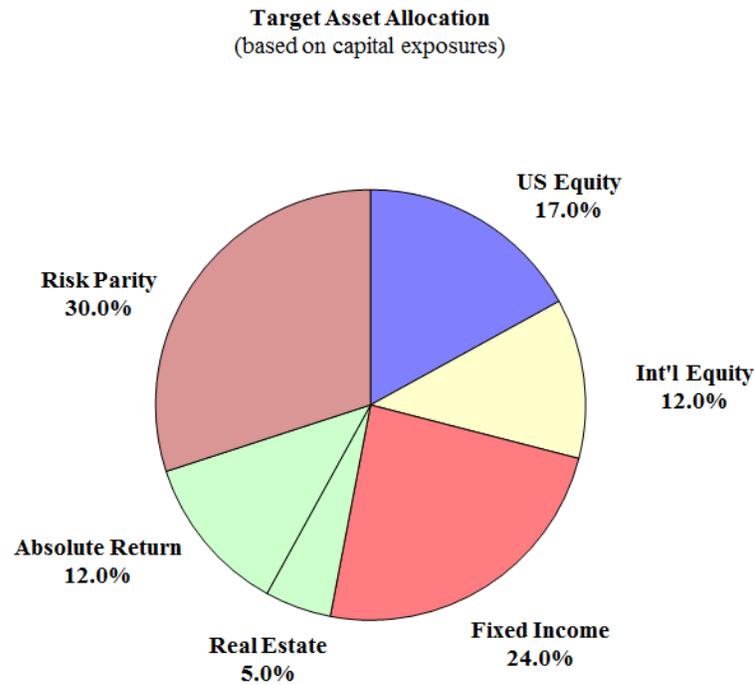
\* Pooled fund

**Police Officers Retirement System – Allocation of Capital Exposures**

**Target Asset Allocation**

The asset structure shown below represents the Trustees’ assessment of their optimal asset allocation as of June 30, 2012. 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.

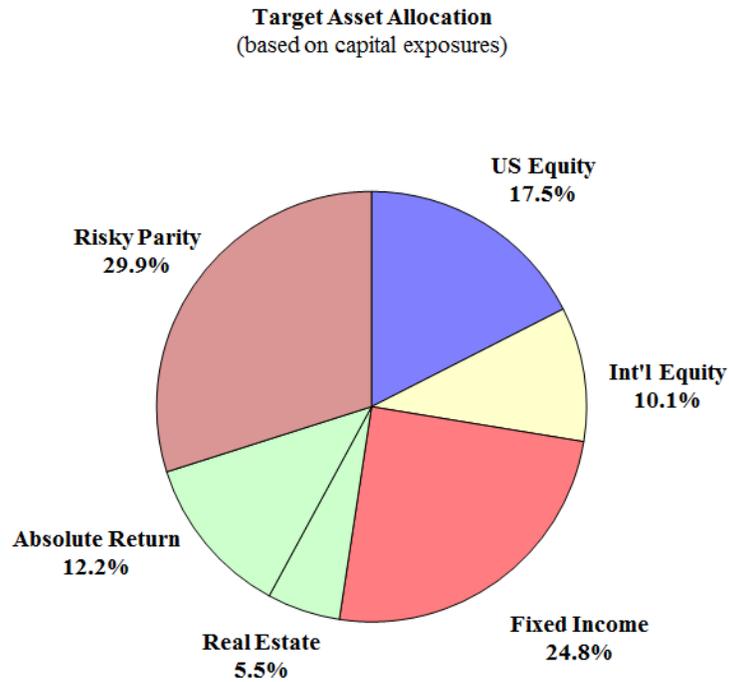
The pie chart below details the target asset mix, consistent with the achievement of the long-term objectives of the System, as of June 30, 2012.



**Actual Asset Allocation as of June 30, 2012**

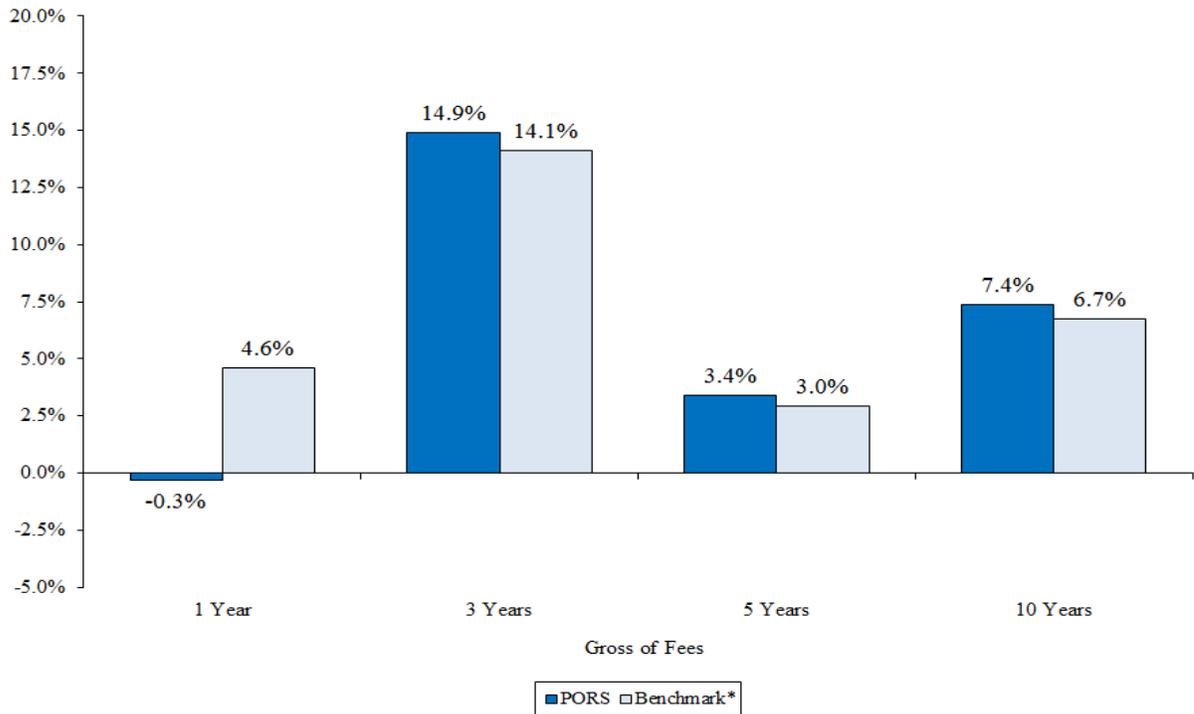
The asset structure of Police Officers Retirement System has historically reflected a proper balance of the System's needs for liquidity, growth of assets, and risk tolerance. The System's investment policy is designed to continue to meet its long-term investment objectives while, at the same time, providing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

The pie chart below details the actual asset allocation as of June 30, 2012.



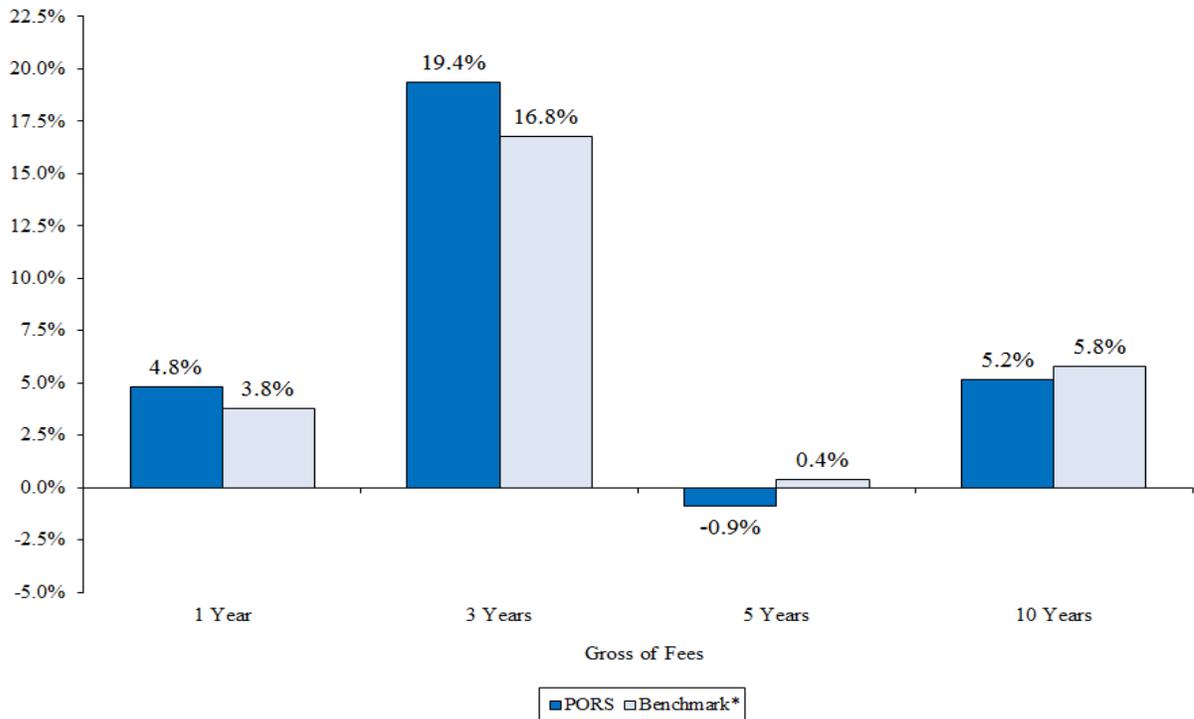
**Investment Results**

**Total Fund:**



\*Benchmark: 35% S&P 500, 35% Barclays Aggregate, 10% Russell 2000, 10% MSCI EAFE, 10% NAREIT

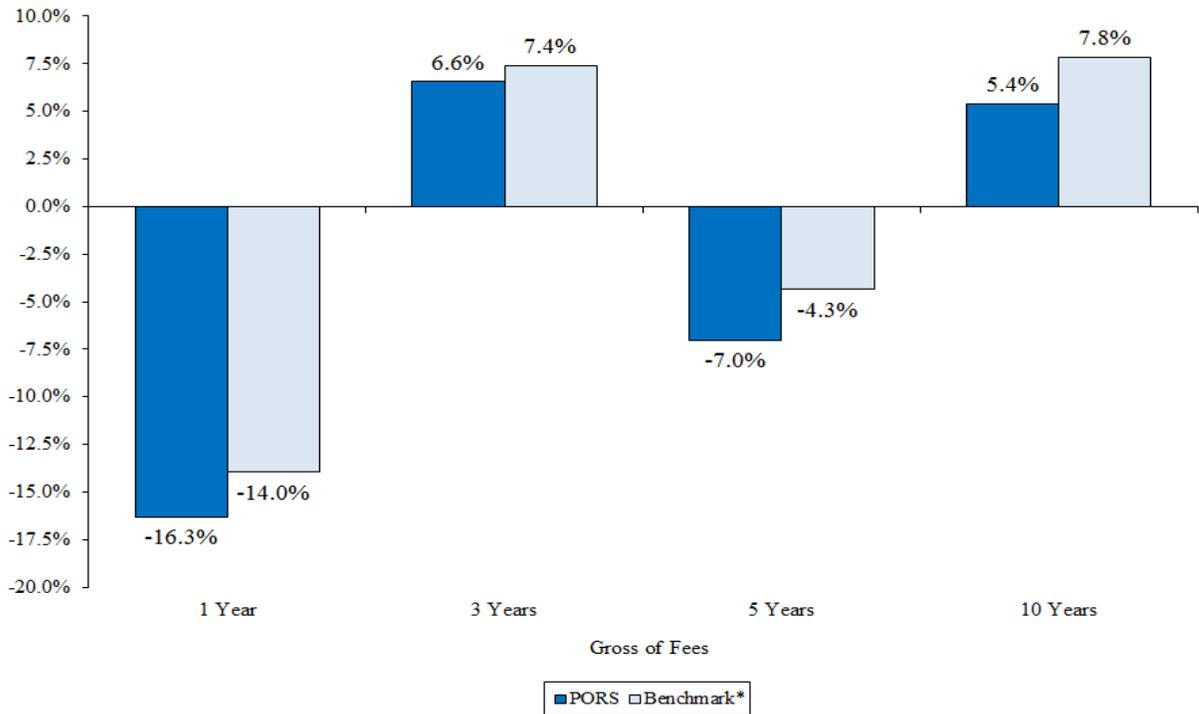
**Domestic Equity:**



\*Benchmark: 78% S&P 500, 22% Russell 2000

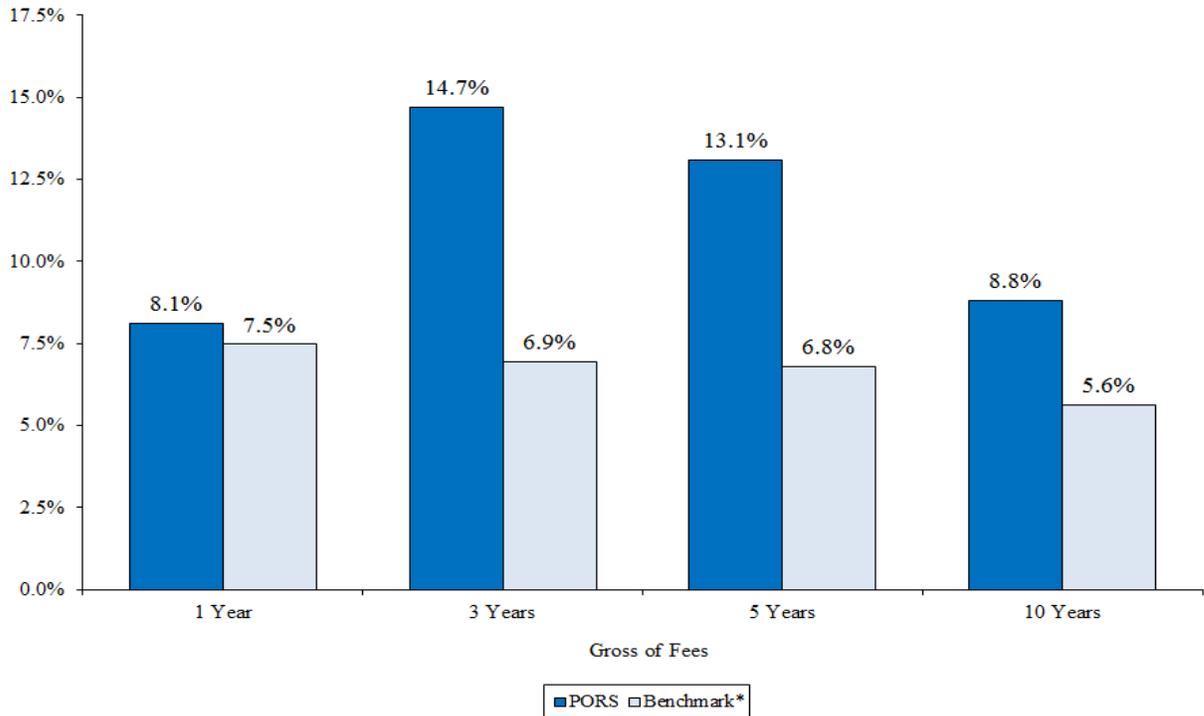
**Investment Results**

**International Equity:**



\*Benchmark: 68% MSCI EAFE, 12% S&P Citigroup EMI EPAC, 20% MSCI Emerging Markets

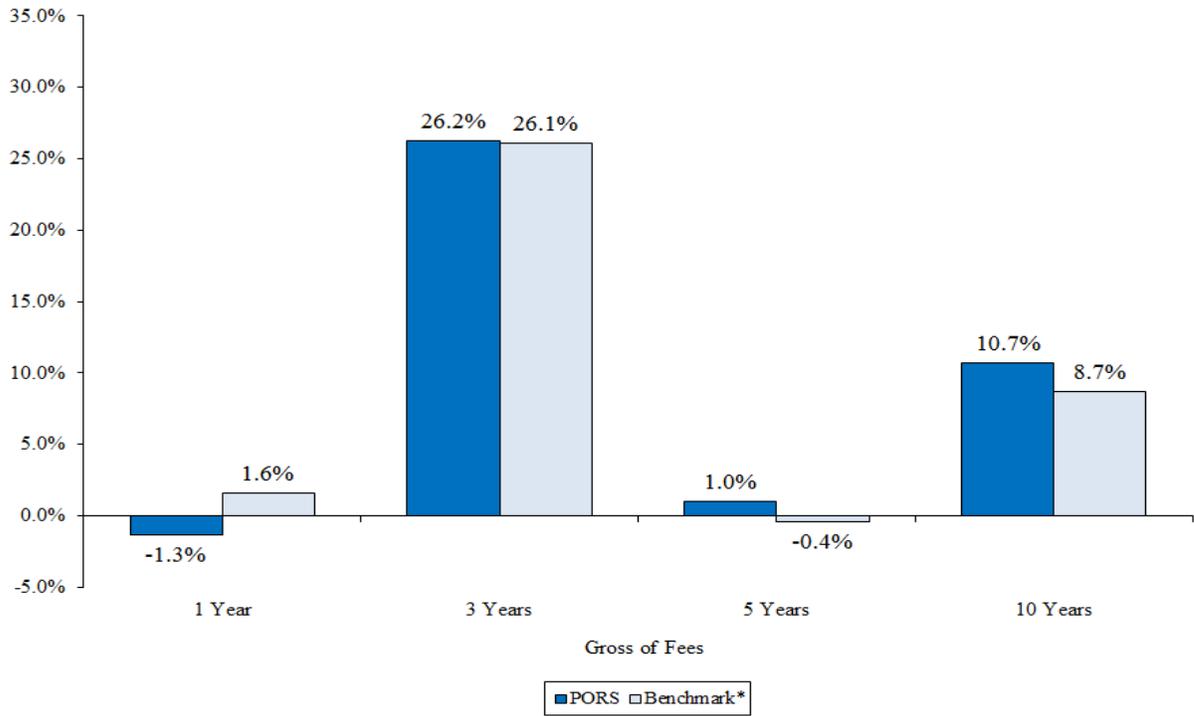
**Fixed Income:**



\*Benchmark: Barclays Aggregate

**Investment Results**

**Real Estate:**



\*Benchmark: FTSE EPRA/NAREIT Global Index

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

**Ten Largest Equity Holdings**

| <u>No. Shares</u> | <u>Description</u>           | <u>Cost</u>         | <u>Fair Value</u>   | <u>% of Total Portfolio</u> |
|-------------------|------------------------------|---------------------|---------------------|-----------------------------|
| 20,820            | Simon Property Group Inc     | \$1,572,395         | \$3,240,841         | 0.32%                       |
| 137,000           | Mitsubishi Estate Co Ltd     | 2,371,836           | 2,434,716           | 0.24%                       |
| 24,834            | Vornado Realty Trust         | 2,195,135           | 2,085,559           | 0.21%                       |
| 10,286            | Unibail-Rodamco Se Eur5      | 1,938,742           | 1,894,055           | 0.19%                       |
| 154,000           | Sun Hung Kai Properties      | 2,361,598           | 1,809,639           | 0.18%                       |
| 25,410            | Equity Residential           | 1,164,534           | 1,584,568           | 0.16%                       |
| 47,668            | Prologis Inc                 | 1,506,681           | 1,584,008           | 0.16%                       |
| 420,000           | Hang Lung Properties Ltd     | 1,409,965           | 1,418,617           | 0.14%                       |
| 25,421            | British American Tobacco Ord | 853,582             | 1,292,437           | 0.13%                       |
| 73,062            | Brookfield Office Properties | <u>1,252,981</u>    | <u>1,272,740</u>    | <u>0.13%</u>                |
|                   | <b>Total</b>                 | <b>\$16,627,449</b> | <b>\$18,617,180</b> | <b>1.86%</b>                |

**Ten Largest Fixed Income Holdings**

| <u>Par Value<br/>(in local values)</u> | <u>Description</u>                                     | <u>Cost<br/>(in U.S. Dollars)</u> | <u>Fair Value<br/>(in U.S. Dollars)</u> | <u>% of Total Portfolio</u> |
|--|--|-----------------------------------|---|-----------------------------|
| 5,743,508                              | U.S. Treas-CPI Inflation Index,<br>2.500%, 01/15/2029  | \$ 6,378,608                      | \$ 7,970,438                            | 0.79%                       |
| 5,241,871                              | U.S. Treas-CPI Inflation Index,<br>2.000%, 01/15/2014  | 5,610,093                         | 5,442,530                               | 0.54%                       |
| 4,729,250                              | U.S. Treas-CPI Inflation Index,<br>2.000%, 01/15/2016  | 5,102,833                         | 5,232,490                               | 0.52%                       |
| 3,639,474                              | U.S. Treas-CPI Inflation Index,<br>1.250%, 07/15/2020  | 4,084,078                         | 4,225,757                               | 0.42%                       |
| 3,048,512                              | U.S. Treas-CPI Inflation Index,<br>2.000%, 01/15/2026  | 3,765,782                         | 3,890,419                               | 0.38%                       |
| 2,855,322                              | U.S. Treas-CPI Inflation Index,<br>1.875%, 07/15/2019  | 3,062,929                         | 3,415,022                               | 0.34%                       |
| 2,965,059                              | U.S. Treas-CPI Inflation Index,<br>1.625%, 01/15/2018  | 3,437,167                         | 3,383,399                               | 0.33%                       |
| 1,543,395                              | U.S. Treas-CPI Inflation Index,<br>2.125%, 02/15/2040  | 2,088,626                         | 2,190,663                               | 0.22%                       |
| 2,110,000                              | U.S. Treasury Note, 0.625%,<br>07/31/2012              | 2,118,953                         | 2,110,823                               | 0.21%                       |
| 1,649,338                              | FHLMC Multi Class Mtg 3857 Tz,<br>Var Rate, 05/15/2041 | <u>1,245,433</u>                  | <u>1,752,867</u>                        | <u>0.17%</u>                |
|  | <b>Total</b>   | <b>\$ 36,894,502</b>              | <b>\$ 39,614,408</b>                    | <b>3.92%</b>                |

**Schedule of Brokerage Commissions**  
Year Ended June 30, 2012

| <u>Broker Name</u>                        | <u>Base Volume</u>   | <u>Total Shares</u> | <u>Base Commission</u> | <u>Commission Percentage</u> |
|---|----------------------|---------------------|------------------------|------------------------------|
| Credit Lyonnais Sec, Seoul                | \$1,971,343          | 18,585              | \$ 3,961               | 0.20%                        |
| Citigroup Global Markets Ltd, London      | 2,156,369            | 256,877             | 3,707                  | 0.17%                        |
| Macquarie Securities Limited, Hong Kong   | 4,425,309            | 2,072,054           | 7,405                  | 0.17%                        |
| Macquarie Secs, Singapore                 | 3,240,525            | 1,537,200           | 5,262                  | 0.16%                        |
| UBS Warburg Asia Ltd, Hong Kong           | 10,031,494           | 4,178,778           | 16,176                 | 0.16%                        |
| Citigroup Gbl Mkts/Salomon, New York      | 9,745,357            | 4,528,838           | 14,894                 | 0.15%                        |
| Barclays Capital, London                  | 2,546,404            | 137,961             | 3,838                  | 0.15%                        |
| Merrill Lynch & Co Inc Atlas Global, NY   | 6,482,114            | 775,889             | 9,725                  | 0.15%                        |
| Merrill Lynch Gilts Ltd, London           | 3,454,893            | 1,304,676           | 5,181                  | 0.15%                        |
| Exane, Paris                              | 1,906,240            | 54,113              | 2,853                  | 0.15%                        |
| Nomura Secs Intl Inc, New York            | 5,209,686            | 941,822             | 7,656                  | 0.15%                        |
| Pershing Securities Ltd, London           | 2,066,383            | 880,133             | 3,026                  | 0.15%                        |
| UBS Warburg Australia Equities, Sydney    | 5,477,944            | 3,237,302           | 7,886                  | 0.14%                        |
| Pershing LLC, Jersey City                 | 20,693,335           | 1,548,087           | 29,632                 | 0.14%                        |
| Merrill Lynch Pierce Fenner, Wilmington   | 10,184,450           | 3,599,020           | 13,162                 | 0.13%                        |
| JPMorgan Secs Ltd, London                 | 5,853,237            | 407,944             | 6,834                  | 0.12%                        |
| Macquarie Equities Ltd, Sydney            | 2,043,893            | 822,671             | 2,364                  | 0.12%                        |
| Wells Fargo Securities LLC, Charlotte     | 2,161,468            | 111,050             | 2,472                  | 0.11%                        |
| BNY Convergenx/LJR, Houston               | 4,338,052            | 134,946             | 4,860                  | 0.11%                        |
| Knight Equity Markets LP, Jersey City     | 2,742,129            | 96,742              | 3,070                  | 0.11%                        |
| Morgan Stanley & Co Inc, NY               | 17,627,008           | 1,838,866           | 19,664                 | 0.11%                        |
| Merrill Lynch Pierce Fenner Smith Inc, NY | 25,919,641           | 980,230             | 28,800                 | 0.11%                        |
| Daiwa Secs Ltd, Hong Kong                 | 6,972,758            | 884,300             | 7,686                  | 0.11%                        |
| KeyBanc Capital Markets Inc, New York     | 1,894,647            | 72,254              | 2,023                  | 0.11%                        |
| Goldman Sachs & Co, NY                    | 34,751,188           | 2,007,228           | 35,246                 | 0.10%                        |
| ITG Hong Kong Limited, Hong Kong          | 4,343,382            | 1,125,400           | 4,357                  | 0.10%                        |
| Brockhouse and Cooper, Montreal           | 2,946,530            | 814,650             | 2,950                  | 0.10%                        |
| Brockhouse & Cooper Inc, Jersey City      | 4,405,913            | 117,820             | 4,410                  | 0.10%                        |
| BNP Paribas Sec Svcs, London              | 6,458,084            | 316,900             | 6,465                  | 0.10%                        |
| Kas Bank NV, Amsterdam                    | 2,701,711            | 224,742             | 2,703                  | 0.10%                        |
| Citigroup Gbl Mkts Inc, New York          | 7,679,047            | 284,191             | 7,671                  | 0.10%                        |
| RBC Capital Markets LLC, New York         | 2,373,518            | 116,528             | 2,320                  | 0.10%                        |
| UBS Securities LLC, Stamford              | 5,905,340            | 273,916             | 5,738                  | 0.10%                        |
| Bouzet Sa Societe De Bourse, Paris        | 10,213,402           | 357,540             | 9,921                  | 0.10%                        |
| Pershing Div of Donaldson, Jersey City    | 3,185,208            | 76,085              | 3,043                  | 0.10%                        |
| Green Street Advisors, Jersey City        | 3,666,166            | 103,601             | 3,467                  | 0.09%                        |
| Cap Instl Svcs Inc-Equities, Dallas       | 2,092,703            | 50,410              | 1,969                  | 0.09%                        |
| Credit Suisse, New York                   | 14,866,068           | 2,351,054           | 13,852                 | 0.09%                        |
| JPMorgan Clearing Corp, New York          | 14,428,526           | 790,407             | 13,278                 | 0.09%                        |
| Barclays Capital Inc/Le, New Jersey       | 2,401,655            | 62,054              | 2,167                  | 0.09%                        |
| Keefe Bruyette and Woods, Jersey City     | 3,228,734            | 77,414              | 2,644                  | 0.08%                        |
| Liquidnet Inc, Brooklyn                   | 33,616,005           | 1,352,088           | 27,045                 | 0.08%                        |
| UBS Equities, London                      | 4,296,563            | 377,278             | 3,155                  | 0.07%                        |
| Deutsche Bk Secs Inc, NY                  | 53,039,289           | 3,123,033           | 37,846                 | 0.07%                        |
| Goldman Sachs Execution & Clearing, NY    | 3,745,530            | 175,277             | 2,629                  | 0.07%                        |
| Jefferies & Co Inc, New York              | 9,776,638            | 477,371             | 6,070                  | 0.06%                        |
| Investment Technology Group, New York     | 4,954,011            | 293,148             | 2,931                  | 0.06%                        |
| Instinet Corp, NY                         | 11,627,958           | 571,602             | 5,716                  | 0.05%                        |
| Barclays Capital Le, Jersey City          | 3,195,254            | 113,802             | 1,431                  | 0.04%                        |
| BNY Convergenx, New York                  | 45,240,372           | 874,769             | 17,495                 | 0.04%                        |
| Other Brokers                             | <u>72,206,348</u>    | <u>20,532,407</u>   | <u>104,610</u>         | <u>0.14%</u>                 |
| <b>Total</b>                              | <b>\$526,489,823</b> | <b>67,461,053</b>   | <b>\$543,268</b>       | <b>0.10%</b>                 |

**Investment Summary**  
(Based on Capital Allocation)

|                          | <u>As of June 30, 2011</u> |                       | <u>As of June 30, 2012</u> |                       |
|--------------------------|----------------------------|-----------------------|----------------------------|-----------------------|
|                          | <u>Market Value</u>        | <u>% Market Value</u> | <u>Market Value</u>        | <u>% Market Value</u> |
| Domestic Equities        | \$340,235,437              | 32.8%                 | \$177,695,940              | 17.5%                 |
| International Equities   | 230,188,711                | 22.3%                 | 102,467,563                | 10.1%                 |
| Fixed Income             | 226,318,665                | 21.9%                 | 248,610,168                | 24.3%                 |
| Real Estate              | 103,605,353                | 10.0%                 | 56,282,744                 | 5.5%                  |
| Alternative Investments  | 127,966,714                | 12.4%                 | 123,847,966                | 12.2%                 |
| Risk-Balanced Portfolios | 0                          | 0.0%                  | 303,398,216                | 29.9%                 |
| Short-term               | <u>5,897,782</u>           | <u>0.6%</u>           | <u>5,035,665</u>           | <u>0.5%</u>           |
| <b>Total</b>             | <b>\$1,034,212,662</b>     | <b>100.0%</b>         | <b>\$1,017,338,262</b>     | <b>100.0%</b>         |

**Schedule of Direct Investment Management Fees**

As of June 30, 2012

| <i>Asset Class</i>                    |                               |  |                      |                    |
|---------------------------------------|-------------------------------|--|----------------------|--------------------|
| <u>Manager</u>                        | <u>Investment Style</u>       |  | <u>Total Assets</u>  | <u>Fees</u>        |
| <i>Domestic Equities</i>              |                               |  |                      |                    |
| ClariVest Asset Management*           | Small Cap Growth              |  | \$ -                 | \$181,815          |
| Goldman Sachs Asset Management*       | Large Cap Growth              |  | -                    | 169,822            |
| Pzena Investment Management*          | Large Cap Value               |  | -                    | 113,824            |
| The Clifton Group                     | S&P 500 Beta Manager          |  | 10,830,761           | 16,395             |
| <i>International Equities</i>         |                               |  |                      |                    |
| McKinley Capital                      | Developed Markets Growth      |  | 33,085,930           | 379,824            |
| Acadian Asset Management              | Emerging Markets              |  | 23,795,301           | 234,191            |
| Acadian Asset Management              | Developed Markets Small Cap   |  | 11,279,283           | 155,258            |
| <i>Fixed Income</i>                   |                               |  |                      |                    |
| DoubleLine Capital                    | Mortgage-Backed Securities    |  | 72,885,514           | 595,744            |
| Loomis, Sayles & Company              | High Yield Bonds              |  | 59,162,137           | 278,199            |
| Dodge & Cox Investment Managers       | Domestic Core Bonds           |  | 56,246,008           | 152,829            |
| The Clifton Group                     | TIPS                          |  | 38,777,386           | 58,700             |
| <i>Real Estate</i>                    |                               |  |                      |                    |
| Cohen & Steers Capital Management     | Global Real Estate Securities |  | 56,282,744           | 543,914            |
| <i>Short-term</i>                     |                               |  |                      |                    |
| BNY Mellon Cash Investment Strategies | Plan Level Cash Accounts      |  | <u>2,622,955</u>     | <u>152,231</u>     |
| <b>Total</b>                          |                               |  | <b>\$364,968,019</b> | <b>\$3,032,746</b> |

\* Terminated during FY 2012



Classic Values, Innovative Advice

March 9, 2012

Fairfax County Police Officers  
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 Police Officers Retirement System as of July 1, 2011. 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. 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 will otherwise remain at this level as long as the actuarial funded ratio remains within a corridor of 90% to 120%. Since the funding ratio is currently below 90%, additional contributions are being made by the County.

### ***Assumptions***

The actuarial assumptions used in performing the July 1, 2011 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 these assumptions, the true cost of the System could vary from our results.

The assumptions and methods used in performing this valuation meet the parameters set by Governmental Accounting Standards Board (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 without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. The census data provided was reviewed for reasonableness and for consistency with prior year's data.

### ***Supporting Schedules***

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

1750 Tysons Boulevard, Suite 1100, McLean, VA 22102

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March 9, 2012  
Fairfax County Police Officers' Retirement System  
Page 2

We are responsible for the 2004 through 2011 information in the Schedule of Funding Progress, Schedule of Employer Contributions and Notes to Trend Data shown in the Financial Section. 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 Police Officers' 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 Police Officers 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 is complete and accurate and has 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, and that as Members of the American Academy of Actuaries, we meet the Qualification Standards to render the opinions contained herein.

Sincerely,  
Cheiron



Fiona E. Liston, FSA  
Principal Consulting Actuary



Christian E. Benjaminson, FSA  
Principal Consulting Actuary



## **Summary of Valuation Results (unaudited)**

### **Overview**

This report presents the results of the July 1, 2011 actuarial valuation of the Fairfax County Police Officers 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 Plan;
- Indicate trends in the financial progress of the Plan;
- Determine the contribution rate to be paid by the County for Fiscal Year 2013; 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 plus expense rate determined as of the implementation date of the corridor method (July 1, 2001) 17.00% of payroll, plus an expense rate, currently 0.30% of payroll. This rate is adjusted for benefit and assumption changes, but otherwise will remain the same as long as the System's actuarial funded ratio remains within a corridor of 90% to 120%.

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 3.09% and the UAL rate has increased by 4.24%, the specific changes are summarized in the table on the next page:

| Changes Since 2001                          | Impact on        |                |
|---|------------------|----------------|
|   | Normal Cost Rate | UAL Rate       |
| 2002 ad-hoc COLA                            | N/A              | + 0.32%        |
| 2004 ad-hoc COLA                            | N/A              | + 0.48%        |
| 2005 Implementation of DROP                 | + 0.18%          | + 0.16%        |
| 2005 ad-hoc COLA                            | N/A              | + 0.46%        |
| 2005 Assumption Changes                     | - 0.18%          | + 0.83%        |
| 2006 ad-hoc COLA                            | N/A              | + 0.45%        |
| 2007 ad-hoc COLA                            | N/A              | + 0.45%        |
| 2007 Remove 30 year service cap on benefits | + 0.04%          | + 0.07%        |
| 2007 Change member contribution rate to 11% | + 0.89%          | N/A            |
| 2008 Change member contribution rate to 10% | + 0.89%          | N/A            |
| 2008 ad-hoc COLA                            | N/A              | + 0.50%        |
| 2010 Assumption Changes                     | + 1.27 %         | + 0.52%        |
| <b>Total Increase</b>                       | <b>+ 3.09%</b>   | <b>+ 4.24%</b> |

The basic corridor funding contribution is currently 24.63% 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%) 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, and any remaining amortization for benefit or assumption changes.

The valuation as of July 1, 2011 shows that the actuarial funded ratio (including a credit for the amortization of prior benefit increases) remains outside of the corridor, so an adjustment of 7.41% of payroll is required by the funding method.

The employer contribution rate for FY 2013 will increase from 30.34% to 32.04% of payroll, on the basis of this year’s valuation results.

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

Since the previous valuation, an experience study was preformed to review the actuarial assumptions. A description of the changes the Board has approved appears in the “Summary of Actuarial Assumptions and Methods” section that follows. The current results reflect these assumptions changes.

### Trends

The rebound in financial markets continued during the fiscal year ending in 2011 causing an actuarial gain on the asset side of the System. The actual return on a market value basis was approximately 25.29%. On an actuarial value basis, the assets returned 10.46% compared with an assumed rate of return of 7.5%. The gain recognized for funding purposes was \$26.5 million.

The measurement of liabilities produced a loss this year in the amount of \$12.5 million. This loss was due to experience not meeting our assumptions about salary increases, retirement behavior, death, etc. Specific components of the loss include:

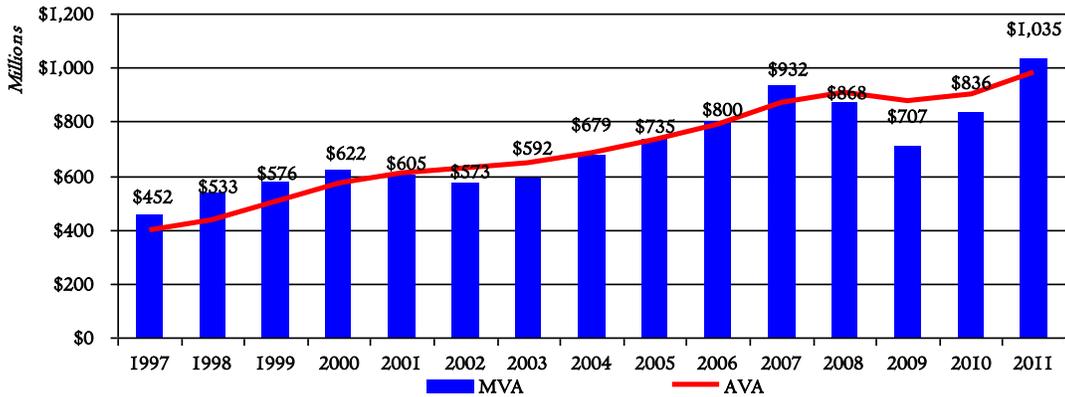
- The average salary increase was 2.6% for active participants who were in both the July 1, 2010 and July 1, 2011 valuations. This was less than the expected salary growth based on the actuarial assumption (per the most recent experience study), which worked out to average 2.7%. This resulted in a negligible gain.
- The valuation assumed a 1% cost-of-living adjustment in 2011 for benefits in pay status (per the most recent experience study). The actual CPI-based COLA was 3.0% last year, creating a liability loss of \$13.7 million.
- The 2011 valuation is the first to incorporate actual sick leave hours into both eligibility and projected benefits for active participants. The accrual of sick leave from 2010 to 2011 produced a loss of \$3.5 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 \$0.8 million to that number.
- There was a \$5.5 million liability gain component that is made up of various other causes such as members terminating, dying or becoming disabled in a way contrary to the assumption and also data changes from previous years.

In addition to the liability loss, the System's liabilities also increased by \$5.8 million due to changes in the actuarial assumptions used, as recommended by an experience study performed in 2011.

The combination of assumption changes and liability and investment experience over the last year led to the System's funding ratio (actuarial value of assets over actuarial accrued liability) increasing from 79.3% at July 1, 2010 to 80.5% at July 1, 2011. 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 82.1% at July 1, 2010 to 83.3% at July 1, 2011.

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.

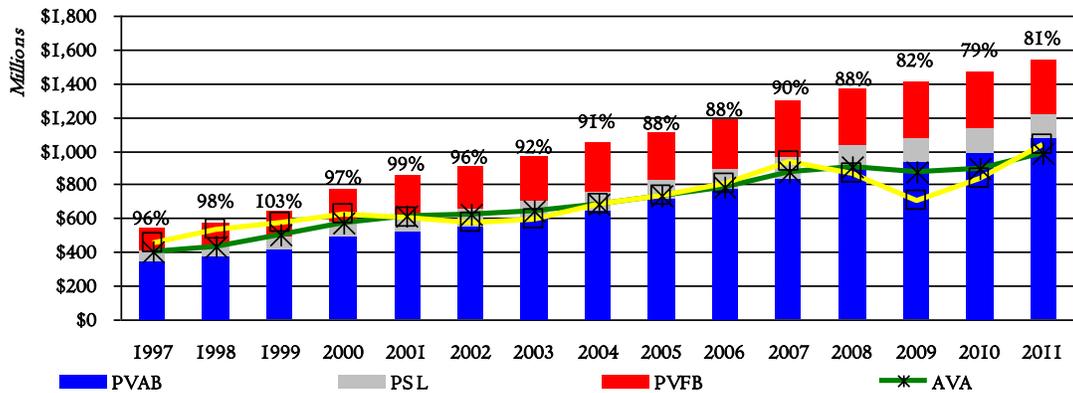
Growth in Assets



There was a substantial increase in the market value of assets (MVA) over last year due to a return of 25.29%. The actuarial value of assets (AVA) increased as well but not as significantly because a portion of this year’s investment gain is being held for future recognition. Due to the significant market increases this year and last, the System has \$53 million in unrecognized gains that will be phased in over the next few years.

Over the period of July 1, 1997 to June 30, 2011 the System’s assets returned approximately 7.18% per year measured at actuarial value, compared to a valuation assumption of 7.5% per year.

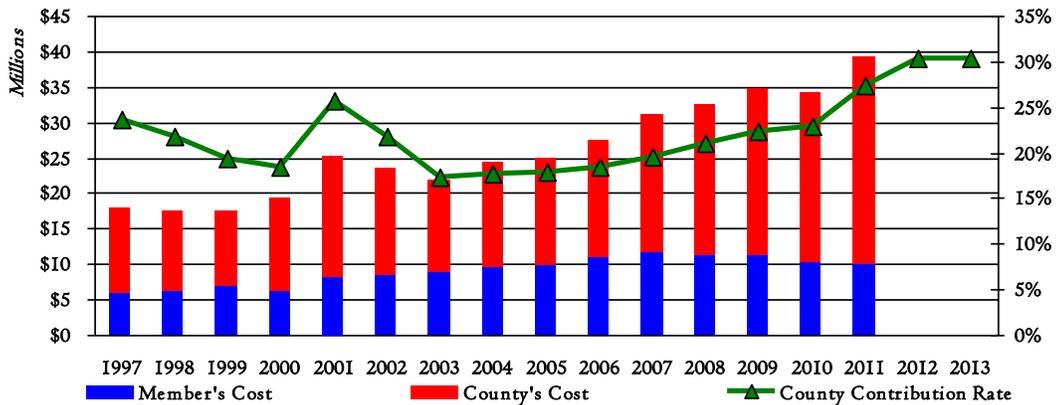
Assets and Liabilities



The three colored bars represent the three different measures of liability mentioned in this report. The amount represented by the top of the red 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 90% to 81% 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

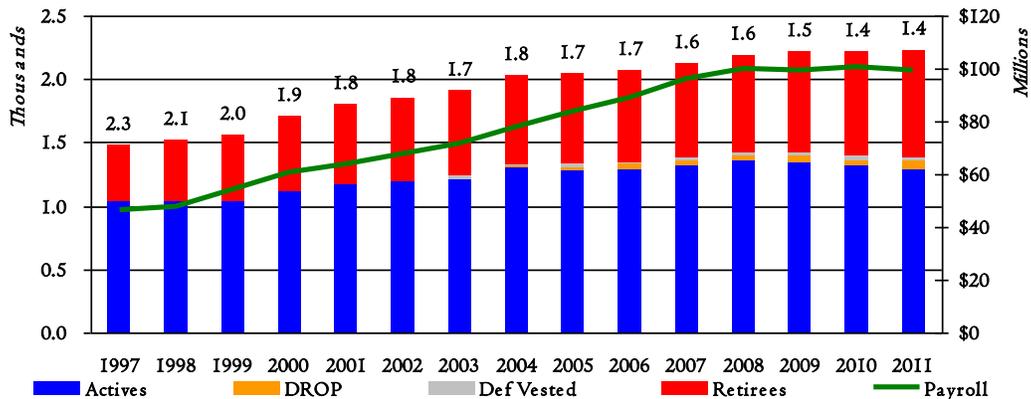


The stacked bars in this graph show the contributions made by both the County and the members (left hand scale). The green line shows the County contribution rate as a percent of payroll (right hand scale).

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 2011 value is the rate prepared by the 2009 valuation and implemented for the period July 1, 2010 to June 30, 2011.

County contribution rates have risen since FY 2003, primarily due to investment returns not meeting the actuarial assumption of 7 ½% per year.

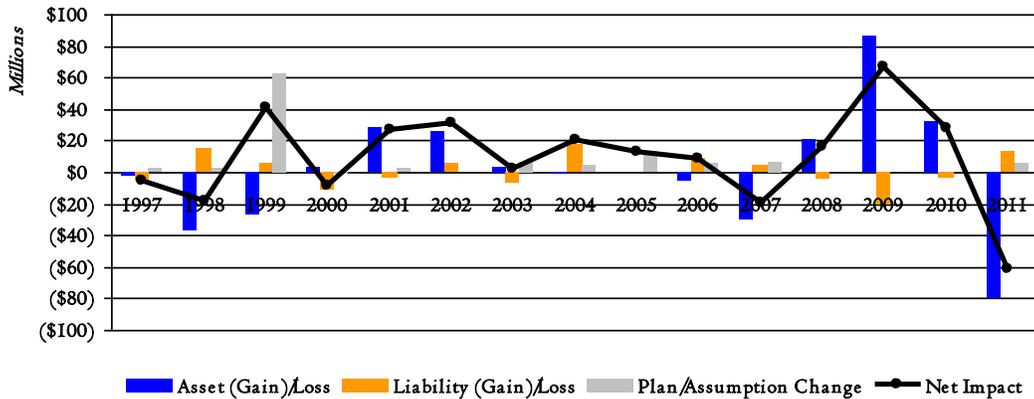
Participant Trends



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 2.3 actives to each inactive in 1997 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.

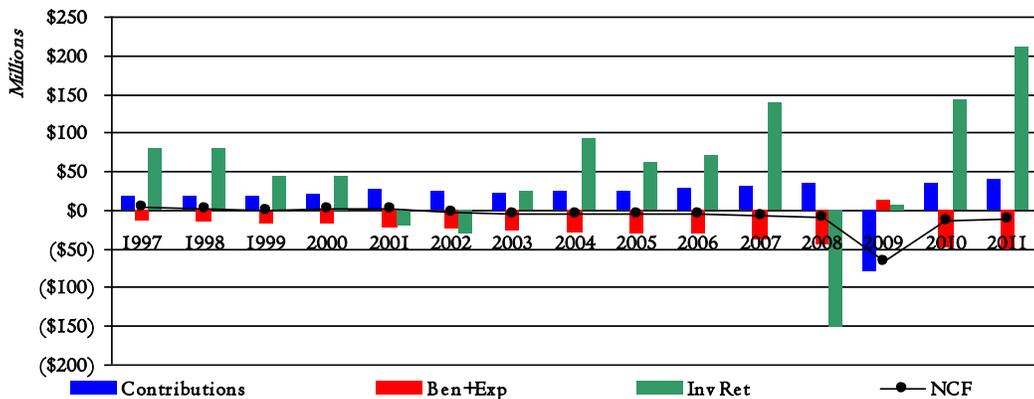
Starting in 2004, the chart also shows the number of DROP participants. Neither County nor member contributions are made on their behalf, which leads to a slightly lower covered payroll for pension plan purposes than would be reflective of the actual active population.

Gains and Losses



This graph shows the annual gains and losses experienced by the System, along with the Unfunded Actuarial Liability (UAL) due to plan amendments and assumption changes. 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



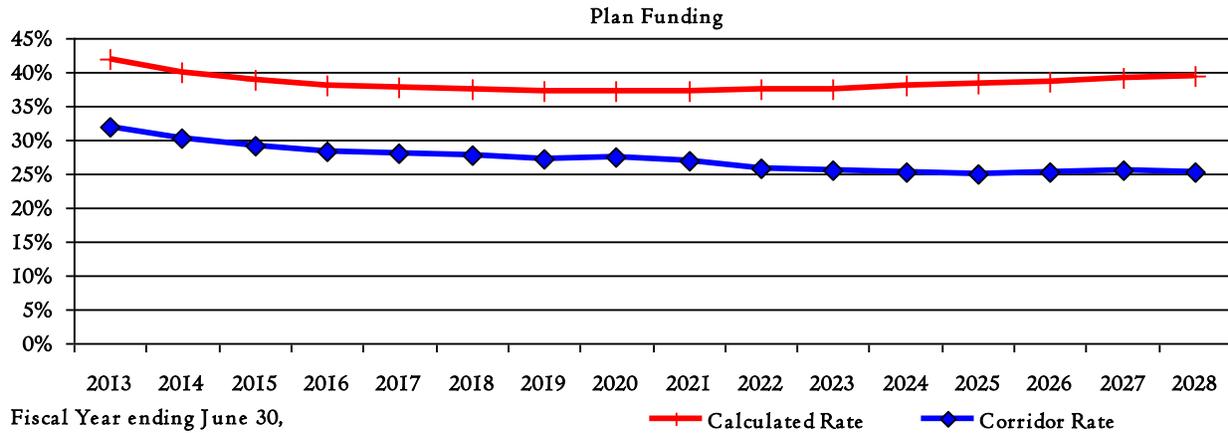
The graph shows the annual cash flows into and out of the System. The graph shows the magnitude the investment returns on the market value (green bars) compared to the contributions (blue bars). The net cash flow (line) is comparing the contributions to benefits and expenses (red bar). Negative cash 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, there is less principal that is available to be reinvested during favorable return periods.

## Future Outlook

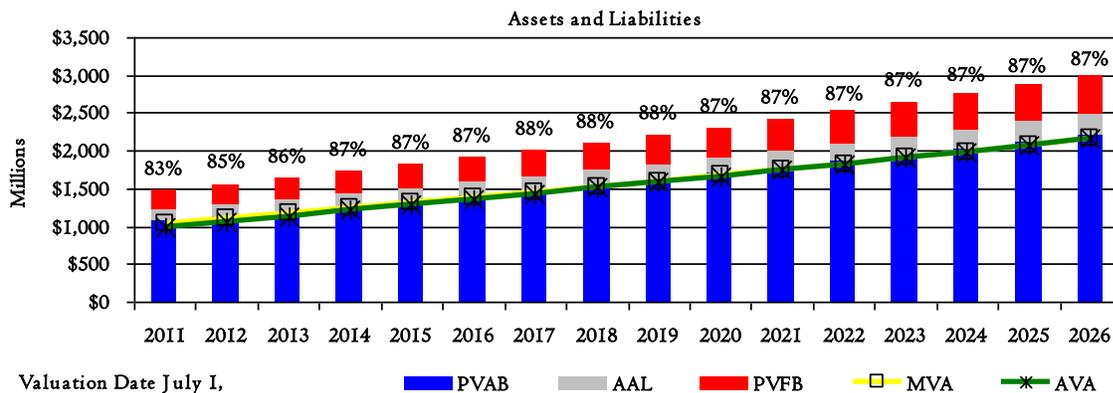
### Base-line Projections

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

The graph entitled “Plan Funding” shows the System not re-entering the corridor (if all other actuarial assumptions are met as well as the 7.5% interest rate). The decrease in corridor contributions towards the end of the period show plan change bases becoming fully amortized and dropping out. The red line shows the actuarially calculated rate if the corridor were not in place. Under this scenario the corridor rate begins at a high point around 32% of payroll and continuously decreases.



The “Assets and Liabilities” graph shows the projected funding status over the next decade. Note that the 2011 funded level differs from that shown in the historical graphs because the ratio used here reflects the corridor method. The System’s funded status is projected to increase from the current level of 83% to 87% by 2014. After that, the corridor method basically marks time and keeps the System around 87% funded.



*Actuarial Section*

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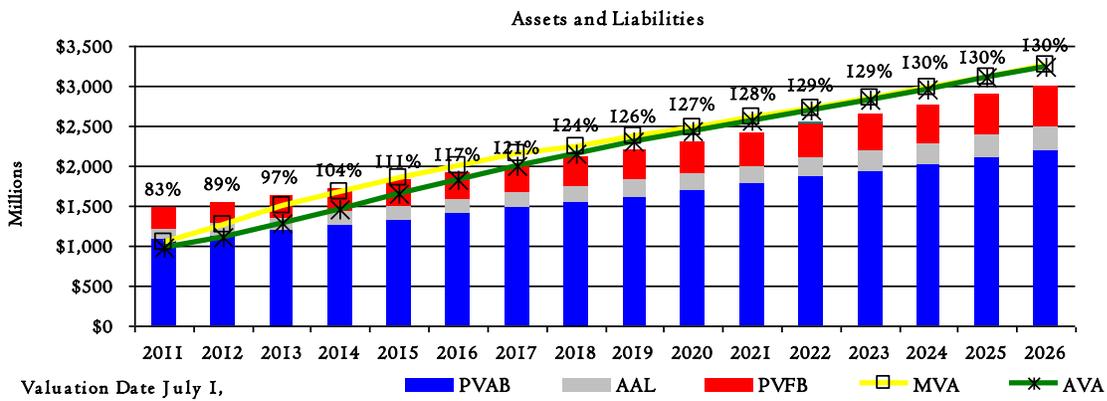
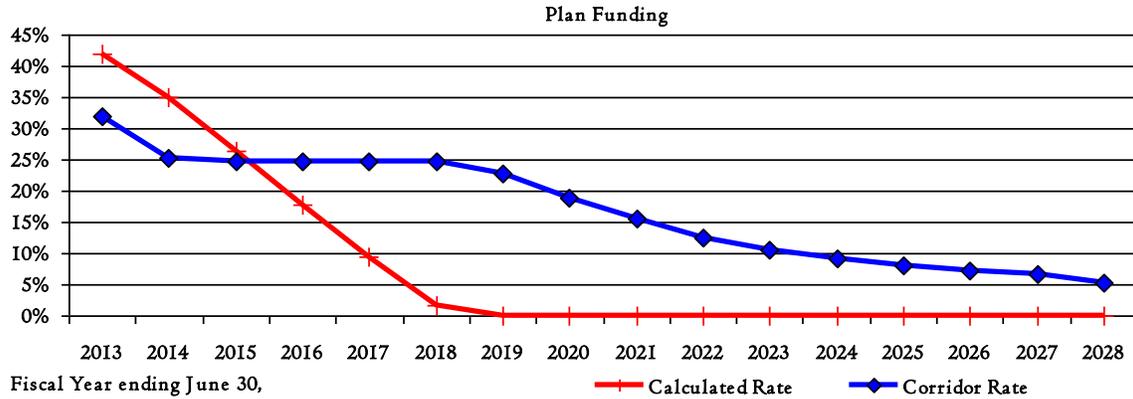
The future funding status of this System will be influenced by the investment earnings. The prior projection assumed the System would earn 7.5% each and every year, which is extremely unlikely.

In the projections that follow we show the risk to the System under volatile markets. Since 1980 the System has averaged 10.32% return per year, therefore, for this analysis we have created the following three scenarios that produce a similar average return.

| <b>Fiscal Year<br/>Ending June 30,</b> | <b>Favorable<br/>Returns Early</b> | <b>Poor<br/>Returns Early</b> | <b>Random<br/>Returns</b> |
|--|------------------------------------|-------------------------------|---------------------------|
| 2012                                   | 24.30%                             | 6.80%                         | 24.50%                    |
| 2013                                   | 19.80%                             | 8.80%                         | 4.78%                     |
| 2014                                   | 13.80%                             | 10.80%                        | 2.73%                     |
| 2015                                   | 11.80%                             | 11.80%                        | 12.48%                    |
| 2016                                   | 10.80%                             | 13.80%                        | 4.88%                     |
| 2017                                   | 8.80%                              | 19.80%                        | 11.37%                    |
| 2018                                   | 6.80%                              | 24.30%                        | 16.82%                    |
| 2019                                   | 7.50%                              | 7.50%                         | 22.60%                    |
| 2020                                   | 7.50%                              | 7.50%                         | 6.17%                     |
| 2021                                   | 7.50%                              | 7.50%                         | 7.13%                     |
| 2022                                   | 7.50%                              | 7.50%                         | 6.15%                     |
| 2023                                   | 7.50%                              | 7.50%                         | 16.88%                    |
| 2024                                   | 7.50%                              | 7.50%                         | 7.42%                     |
| 2025                                   | 7.50%                              | 7.50%                         | -4.24%                    |
| 2026                                   | 7.50%                              | 7.50%                         | 19.14%                    |
| <b>Average</b>                         | <b>10.30%</b>                      | <b>10.30%</b>                 | <b>10.32%</b>             |

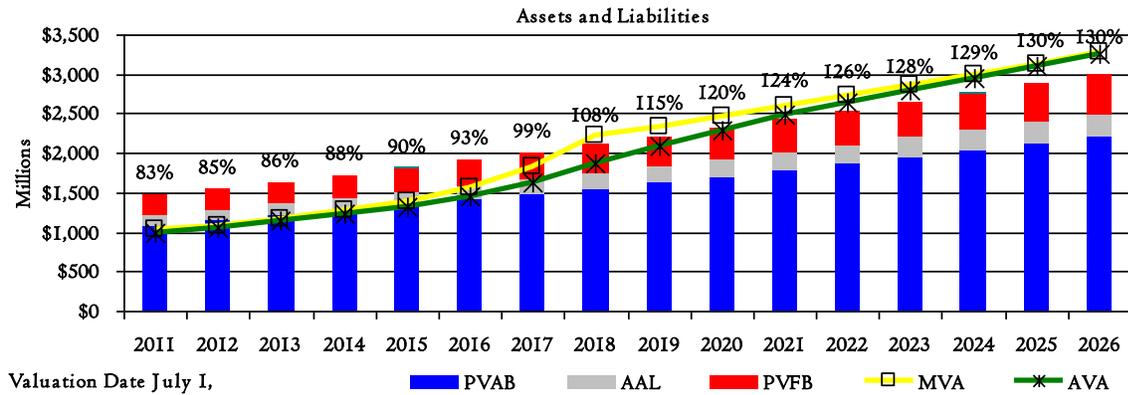
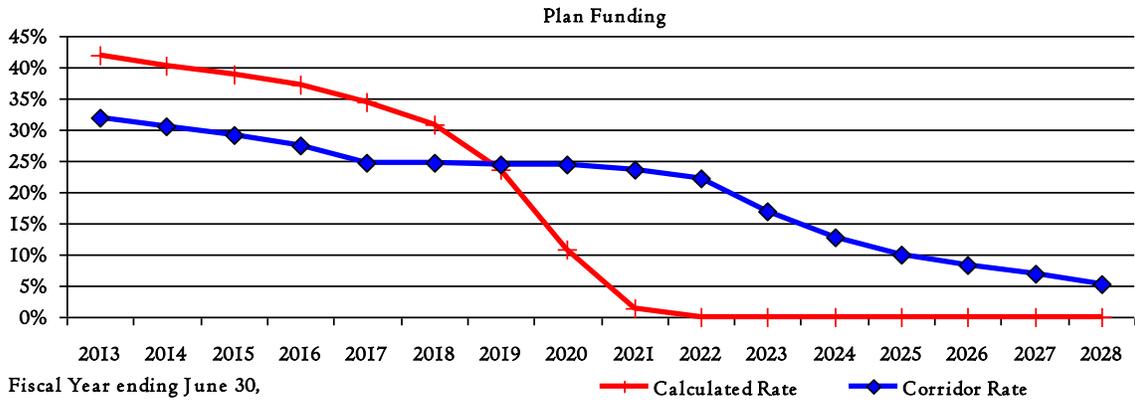
Alternative Projection -- with favorable returns early in the projection:

Under this scenario, the corridor contribution rate would decrease each year as the System experiences investment gains in the first five years. The System reaches 97% funded by 2013 (and re-enters the corridor) and is fully funded by 2014.



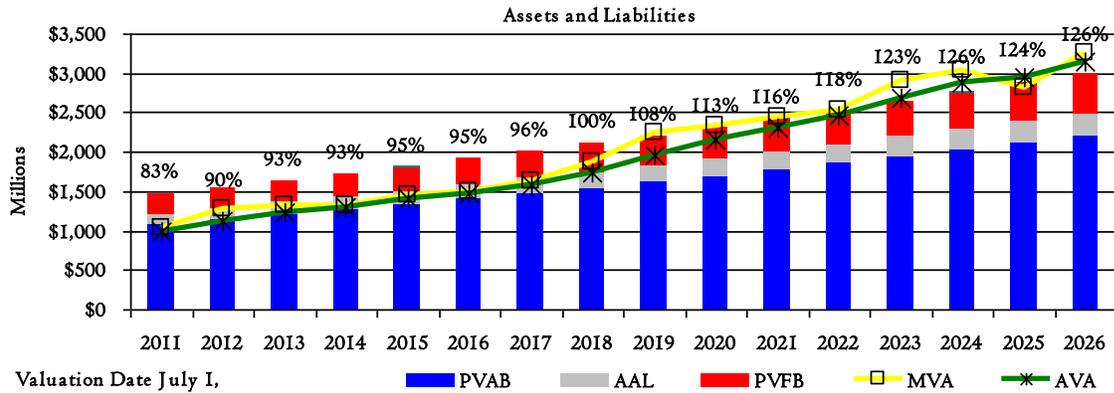
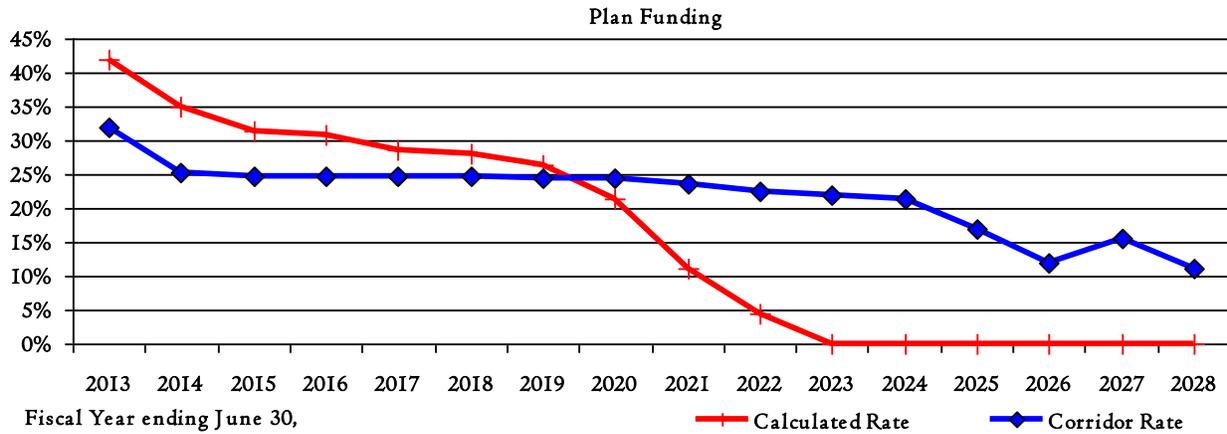
Alternative Projection -- with poor returns early in the projection:

Under this scenario, the corridor contribution rate still declines given the current amount of stored gains. The County would re-enter the corridor in 2015 and reach full funding in 2018.



Alternative Projection -- with random returns:

Under this scenario, the System re-enters the corridor in 2014 and reaches 100% funded by 2018.



| <b>Summary of Principal Plan Results</b>                           |                         |                         |              |
|--|-------------------------|-------------------------|--------------|
| <b>Valuation as of:</b>  | <b>7/1/2010</b>         | <b>7/1/2011</b>         | <b>% Chg</b> |
| <b><u>Participant Counts</u></b>                                   |                         |                         |              |
| Actives (excluding DROP)   | 1,312                   | 1,293                   | -1.4%        |
| DROPs  | 51                      | 59                      | 15.7%        |
| Terminated Vesteds   | 30                      | 34                      | 13.3%        |
| In Pay Status  | <u>824</u>              | <u>850</u>              | 3.2%         |
| Total  | 2,217                   | 2,236                   | 0.9%         |
| Annual Salaries of Active Members                                  | \$ 100,500,094          | \$ 99,070,327           | -1.4%        |
| Annual Retirement Allowances for Retired Members and Beneficiaries | \$ 45,078,724           | \$ 48,395,771           | 7.4%         |
| <b><u>Assets and Liabilities</u></b>                               |                         |                         |              |
| Actuarial Accrued Liability  | \$ 1,135,015,298        | \$ 1,219,609,107        | 7.5%         |
| Assets for Valuation Purposes                                      | <u>899,543,387</u>      | <u>982,153,681</u>      | 9.2%         |
| Unfunded Actuarial Liability                                       | \$ 235,471,911          | \$ 237,455,426          | 0.8%         |
| Funding Ratio  | 79.3%                   | 80.5%                   |              |
| Present Value of Accrued Benefits                                  | \$ 985,053,690          | \$ 1,080,667,773        | 9.7%         |
| Market Value of Assets   | <u>836,033,056</u>      | <u>1,035,145,961</u>    | 23.8%        |
| Unfunded Accrued Liability (not less than \$0)                     | \$ 149,020,634          | \$ 45,521,812           | -69.5%       |
| Accrued Benefit Funding Ratio                                      | 84.9%                   | 95.8%                   |              |
| <b><u>Contributions as a Percentage of Payroll</u></b>             |                         |                         |              |
|  | <b>Fiscal Year 2012</b> | <b>Fiscal Year 2013</b> |              |
| <b><u>GASB Method:</u></b>   |                         |                         |              |
| Normal Cost Contribution   | 18.82%                  | 20.09%                  |              |
| Unfunded Actuarial Liability Contribution                          | 19.79%                  | 21.61%                  |              |
| Administrative Expense   | <u>0.30%</u>            | <u>0.30%</u>            |              |
| Total Contribution   | 38.91%                  | 42.00%                  |              |
| <b><u>Corridor Method:</u></b>                                     |                         |                         |              |
| Normal Cost Contribution   | 18.82%                  | 20.09%                  |              |
| Increase Due to Amortized Changes                                  | 3.72%                   | 4.24%                   |              |
| Amortization of Amount Outside Corridor                            | 7.50%                   | 7.41%                   |              |
| Administrative Expense   | <u>0.30%</u>            | <u>0.30%</u>            |              |
| Corridor Method  | 30.34% *                | 32.04%                  |              |

\* The actual contribution rate being paid by the County in FY 2012 is 31.30%.

## **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 employer 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 employer’s total contribution rate is equal to the normal cost rate, plus rate changes due to assumption changes or amendments passed since June 30, 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 normal cost rate, plus post-2001 changes, plus expense rate.

### **Actuarial Value of Assets**

For purposes of determining the County contribution to the Plan, 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**

| <b>Annual Deaths Per 10,000 Members<br/>RP-2000 Mortality Projected to 2015*</b> |             |               |
|--|-------------|---------------|
| <b>Age</b>   | <b>Male</b> | <b>Female</b> |
| 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         |

\* 20% of deaths are assumed to be service-connected.

| <b>Annual Deaths Per 10,000 Disabled Members<br/>RP-2000 Mortality Project to 2015<br/>with ages set forward 5 years</b> |             |               |
|--|-------------|---------------|
| <b>Age</b>   | <b>Male</b> | <b>Female</b> |
| 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)

| <b>Annual Terminations Per 1,000 Members</b> |                     |
|--|---------------------|
| <b>Years of Service</b>                      | <b>Terminations</b> |
| 0  | 70                  |
| 1  | 40                  |
| 2  | 45                  |
| 3  | 50                  |
| 4  | 40                  |
| 5  | 30                  |
| 6  | 20                  |
| 7  | 15                  |
| 8  | 14                  |
| 9  | 13                  |
| 10   | 12                  |
| 11   | 11                  |
| 12   | 10                  |
| 13   | 10                  |
| 14   | 10                  |
| 15   | 8                   |
| 16   | 6                   |
| 17   | 4                   |
| 18   | 2                   |
| 19   | 2                   |
| 20 or more                                   | 2                   |

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

**Disability**

| <b>Annual Disabilities Per 1,000 Members*</b> |                        |
|---|------------------------|
| <b>Age</b>                                    | <b>Male and Female</b> |
| 20  | 2                      |
| 25  | 2                      |
| 30  | 2                      |
| 35  | 2                      |
| 40  | 2                      |
| 45  | 4                      |
| 50  | 6                      |
| 55  | 6                      |
| 60  | 6                      |

\* 70% of disabilities are assumed to be service-connected. Of these, 100% are assumed to receive Workers' Compensation benefits.

**Retirement**

| Years of Service | Probability of Retirement* |                     |
|------------------|----------------------------|---------------------|
|                  | Hired Pre - 7/1/81         | Hired Post - 7/1/81 |
| 20               | 40%                        | N/A                 |
| 21               | 40                         | N/A                 |
| 22               | 40                         | N/A                 |
| 23               | 40                         | N/A                 |
| 24               | 40                         | N/A                 |
| 25               | 40                         | 40%                 |
| 26               | 40                         | 40                  |
| 27               | 40                         | 40                  |
| 28               | 40                         | 40                  |
| 29               | 40                         | 40                  |
| 30               | 40                         | 40                  |

\* 50% are assumed to DROP.

**Merit/Seniority Salary Increase** (in addition to across-the-board increase)

| Years of Service | Merit/Seniority Increase* |
|------------------|---------------------------|
| 0                | 8.0%                      |
| 5                | 4.3                       |
| 10               | 1.0                       |
| 15               | 3.0                       |
| 20               | 1.8                       |
| 25               | 1.8                       |
| 30               | 1.8                       |

\* Spikes of 8.0% at 14 years of service and 6.7% at 19 years of service.

**Family Composition**

For purposes of valuing the pre-retirement death benefit, an assumption concerning how many employees are married is needed. The assumption used in this valuation is that 80% of active employees are married at death and that the female spouse is five years younger than the male spouse. In addition, each married employee is assumed to have two children, 22 and 24 years younger than the employee.

**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:        | 3.00% compounded per annum.** |
| Total Payroll Increase (For amortization): | 3.00% compounded per annum.   |
| Administrative Expenses:                   | 0.30% of payroll.             |

\* Due to the recent history of County pay freezes, we use a 0% rate of general wage increase for fiscal years ending 2011 and 2012.

\*\* Benefit increases are limited to 4% per year. We will use an assumption that post-retirement cost-of-living increases will be 1% for July 1, 2011 and July 1, 2012, and 2.75% thereafter.

**Changes Since Last Valuation**

All of the assumptions were reviewed as of the experience study performed in early 2011. The assumptions that were changed since the last valuation include healthy and disabled mortality rates, termination and retirement rates, salary increases and cost-of-living adjustments. Actual sick leave balances are also now used instead of an assumption.

**Analysis of Financial Experience**

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

| <b>Type of Activity</b>                                     | <b>2006</b>          | <b>2007</b>         | <b>2008</b>           | <b>2009</b>            | <b>2010</b>            | <b>2011</b>         |
|---|----------------------|---------------------|-----------------------|------------------------|------------------------|---------------------|
| Investment Income   | \$5,829,376          | \$30,476,299        | \$(19,958,077)        | \$ (86,460,572)        | \$ (31,755,165)        | \$26,496,140        |
| Combined Liability Experience                               | <u>(9,007,438)</u>   | <u>(9,438,877)</u>  | <u>4,139,287</u>      | <u>17,649,316</u>      | <u>3,313,576</u>       | <u>(12,495,024)</u> |
| <b>Gain (or Loss) During Year from Financial Experience</b> | <b>\$(3,178,062)</b> | <b>\$21,037,422</b> | <b>\$(15,818,790)</b> | <b>\$ (68,811,256)</b> | <b>\$ (28,441,589)</b> | <b>\$14,001,116</b> |
| Non-Recurring Items   | <u>(4,472,878)</u>   | <u>(5,904,299)</u>  | <u>(5,902,768)</u>    | <u>0</u>               | <u>0</u>               | <u>(5,795,987)</u>  |
| <b>Composite Gain (or Loss) During Year</b>                 | <b>\$(7,650,940)</b> | <b>\$15,133,123</b> | <b>\$(21,721,558)</b> | <b>\$ (68,811,256)</b> | <b>\$ (28,441,589)</b> | <b>\$ 8,205,129</b> |

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

| <b>Year Ended June 30,</b> | <b>Added to Rolls</b>   | <b>Removed From Rolls</b> | <b>On Rolls @ Yr. End</b> | <b>%</b>                  | <b>Average</b>   |               |        |           |
|----------------------------|-------------------------|---------------------------|---------------------------|---------------------------|------------------|---------------|--------|-----------|
| <b>No.</b>                 | <b>Annual Allowance</b> | <b>No.</b>                | <b>Annual Allowance</b>   | <b>Increase Allowance</b> | <b>Allowance</b> |               |        |           |
| 2006                       | 19                      | \$ 2,180,765              | 7                         | \$ 222,265                | 727              | \$ 32,711,241 | 6.37%  | \$ 44,995 |
| 2007                       | 60                      | 5,223,988                 | 44                        | 1,034,662                 | 743              | 36,900,567    | 12.81% | 49,664    |
| 2008                       | 33                      | 3,504,943                 | 19                        | 611,148                   | 757              | 39,794,362    | 7.84%  | 52,569    |
| 2009                       | 36                      | 2,347,460                 | 5                         | 214,258                   | 788              | 41,927,564    | 5.36%  | 53,208    |
| 2010                       | 48                      | 3,725,159                 | 12                        | 574,000                   | 824              | 45,078,724    | 7.52%  | 54,707    |
| 2011                       | 34                      | 3,623,899                 | 8                         | 306,852                   | 850              | 48,395,771    | 7.36%  | 56,936    |

**Solvency Tests  
Aggregate Accrued Liabilities For**

| <b>Valuation Date July 1,</b> | (1)                                | (2)   | (3)   | <b>Reported Assets *</b> | <b>Portion of Accrued Liabilities by Reported Assets</b> |            |            |
|-------------------------------|------------------------------------|---|---|--------------------------|--|------------|------------|
|                               | <b>Active Member Contributions</b> | <b>Retirees, Vested Terms, Beneficiaries &amp; DROP</b> | <b>Active Members (Employer Financed Portion)</b> |                          | <b>(1)</b>   | <b>(2)</b> | <b>(3)</b> |
| 2006                          | \$ 81,953,700                      | \$ 514,169,426  | \$ 301,355,058                                    | \$ 788,765,775           | 100%   | 100%       | 64%        |
| 2007                          | 87,002,993                         | 573,084,866   | 308,647,510                                       | 870,974,612              | 100%   | 100%       | 68%        |
| 2008                          | 92,223,155                         | 623,812,098   | 315,297,859                                       | 908,077,197              | 100%   | 100%       | 61%        |
| 2009                          | 96,351,833                         | 658,492,487   | 321,194,627                                       | 879,543,429              | 100%   | 100%       | 39%        |
| 2010                          | 100,709,756                        | 695,041,990   | 339,263,552                                       | 899,543,387              | 100%   | 100%       | 31%        |
| 2011                          | 104,188,027                        | 732,172,476   | 383,248,604                                       | 982,153,681              | 100%   | 100%       | 38%        |

\* 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**

| <b><u>Fiscal Year</u></b> | <b><u>Plan Member Contributions</u></b> | <b><u>Employer Contributions</u></b> | <b><u>Employer Contributions % of Covered Payroll</u></b> | <b><u>Net Investment Income (loss)</u></b> | <b><u>Total Additions</u></b> |
|---------------------------|---|--------------------------------------|---|--|-------------------------------|
| 2003                      | 8,941,529                               | 12,923,806                           | 17.30%  | 23,248,712                                 | 45,114,047                    |
| 2004                      | 9,689,253                               | 14,682,201                           | 17.96%  | 91,176,999                                 | 115,548,453                   |
| 2005                      | 9,930,883                               | 14,901,070                           | 17.96%  | 61,323,112                                 | 86,155,065                    |
| 2006                      | 10,899,659                              | 16,727,287                           | 18.44%  | 69,755,418                                 | 97,382,364                    |
| 2007                      | 11,796,129                              | 19,222,753                           | 19.55%  | 138,659,208                                | 169,678,090                   |
| 2008                      | 11,175,450                              | 21,447,907                           | 21.00%  | (55,802,375)                               | (23,179,018)                  |
| 2009                      | 11,246,986                              | 23,508,402                           | 22.34%  | (151,727,685)                              | (116,972,297)                 |
| 2010                      | 10,389,241                              | 23,766,626                           | 22.84%  | 143,107,767                                | 177,263,634                   |
| 2011                      | 10,142,459                              | 29,174,611                           | 28.31%  | 210,054,206                                | 249,371,276                   |
| 2012                      | 10,109,068                              | 31,700,690                           | 31.30%  | (6,731,294)                                | 35,078,464                    |

**Schedule of Deductions by Type**

| <b><u>Fiscal Year</u></b> | <b><u>Benefit Payments</u></b> | <b><u>Refunds of Contributions</u></b> | <b><u>Administrative Expenses</u></b> | <b><u>Total Deductions</u></b> |
|---------------------------|--------------------------------|--|---------------------------------------|--------------------------------|
| 2003                      | 25,803,466                     | 525,574                                | 210,934                               | 26,539,974                     |
| 2004                      | 27,682,363                     | 350,894                                | 258,352                               | 28,291,609                     |
| 2005                      | 29,242,384                     | 739,440                                | 228,780                               | 30,210,604                     |
| 2006                      | 31,302,806                     | 528,718                                | 218,347                               | 32,049,871                     |
| 2007                      | 37,310,748                     | 435,566                                | 429,093                               | 38,175,407                     |
| 2008                      | 39,533,485                     | 607,913                                | 445,751                               | 40,587,149                     |
| 2009                      | 43,467,322                     | 761,803                                | 337,334                               | 44,566,459                     |
| 2010                      | 47,096,822                     | 406,863                                | 349,179                               | 47,852,864                     |
| 2011                      | 49,429,119                     | 466,363                                | 362,889                               | 50,258,371                     |
| 2012                      | 52,043,157                     | 357,901                                | 372,137                               | 52,773,195                     |

**Schedule of Benefit Payments by Type**

| <b>Fiscal Year</b> | <b>Service Annuity</b> | <b>Service-Connected Disability</b> | <b>Ordinary Disability</b> | <b>Survivor Benefit</b> | <b>Total</b> |
|--------------------|------------------------|-------------------------------------|----------------------------|-------------------------|--------------|
| 2003               | 23,352,203             | 995,254                             | 154,408                    | 1,301,601               | 25,803,466   |
| 2004               | 24,982,292             | 1,110,494                           | 159,948                    | 1,429,629               | 27,682,363   |
| 2005               | 26,542,408             | 1,043,212                           | 164,651                    | 1,492,113               | 29,242,384   |
| 2006               | 28,426,759             | 1,134,848                           | 144,476                    | 1,596,723               | 31,302,806   |
| 2007               | 34,077,659             | 1,194,359                           | 124,092                    | 1,914,638               | 37,310,748   |
| 2008               | 36,099,484             | 1,228,039                           | 94,230                     | 2,111,932               | 39,533,685   |
| 2009               | 39,708,613             | 1,241,328                           | 90,442                     | 2,426,939               | 43,467,322   |
| 2010               | 43,069,896             | 1,218,305                           | 90,804                     | 2,717,817               | 47,096,822   |
| 2011               | 45,302,801             | 1,173,023                           | 109,018                    | 2,844,277               | 49,429,119   |
| 2012               | 47,757,201             | 1,180,749                           | 149,163                    | 2,956,044               | 52,043,157   |

**Schedule of Retired Members by Benefit Type**

| <b>Fiscal Year</b> | <b>Service Annuity</b> | <b>Service-Connected Disability</b> | <b>Ordinary Disability</b> | <b>Survivor Benefit</b> | <b>Total</b> |
|--------------------|------------------------|-------------------------------------|----------------------------|-------------------------|--------------|
| 2003               | 569                    | 33                                  | 9                          | 72                      | 683          |
| 2004               | 582                    | 32                                  | 9                          | 75                      | 698          |
| 2005               | 597                    | 32                                  | 9                          | 77                      | 715          |
| 2006               | 608                    | 32                                  | 8                          | 79                      | 727          |
| 2007               | 618                    | 32                                  | 7                          | 86                      | 743          |
| 2008               | 634                    | 30                                  | 6                          | 87                      | 757          |
| 2009               | 660                    | 30                                  | 6                          | 92                      | 788          |
| 2010               | 691                    | 30                                  | 6                          | 98                      | 825          |
| 2011               | 716                    | 30                                  | 7                          | 97                      | 850          |
| 2012               | 735                    | 30                                  | 7                          | 104                     | 876          |

**Schedule of Average Monthly Benefit Amounts**

| <b>Fiscal Year</b> | <b>Service Annuity</b> | <b>Service-Connected Disability</b> | <b>Ordinary Disability</b> | <b>Survivor Benefit</b> | <b>Average</b> |
|--------------------|------------------------|-------------------------------------|----------------------------|-------------------------|----------------|
| 2003               | 3,602                  | 2,617                               | 1,482                      | 1,561                   | 3,311          |
| 2004               | 3,713                  | 2,699                               | 1,525                      | 1,609                   | 3,412          |
| 2005               | 3,895                  | 2,908                               | 1,599                      | 1,691                   | 3,584          |
| 2006               | 4,063                  | 3,111                               | 1,467                      | 1,825                   | 3,750          |
| 2007               | 4,511                  | 3,266                               | 1,401                      | 2,013                   | 4,139          |
| 2008               | 4,752                  | 3,453                               | 1,256                      | 2,208                   | 4,381          |
| 2009               | 4,805                  | 3,439                               | 1,261                      | 2,031                   | 4,434          |
| 2010               | 4,956                  | 3,360                               | 1,290                      | 2,290                   | 4,554          |
| 2011               | 5,154                  | 3,284                               | 1,776                      | 2,392                   | 4,745          |
| 2012               | 5,330                  | 3,377                               | 1,829                      | 2,390                   | 4,886          |



# **Fairfax County Police Officers Retirement System**



**A Fairfax County, Va.,  
publication**

## **Comprehensive Annual Financial Report**

**For the Fiscal Year ended June 30, 2012**