Employees' Retirement System of Baltimore County, Maryland

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

A Pension Trust Fund of Baltimore County

**For the Fiscal Years Ended June 30, 2014 and 2013**

# COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE EMPLOYEES' RETIREMENT SYSTEM OF BALTIMORE COUNTY

## FOR THE YEARS ENDED JUNE 30, 2014 AND 2013

**A PENSION**
**TRUST FUND OF**
**BALTIMORE COUNTY**
**MARYLAND**

<u>Prepared By:</u>
Office of Budget and Finance

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Government Finance Officers Association

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

**Employees' Retirement System**

**of Baltimore County, Maryland**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

**June 30, 2013**

Jeffrey R. Emer

Executive Director/CEO

# INTRODUCTORY SECTION

## EMPLOYEES' RETIREMENT SYSTEM OF BALTIMORE COUNTY

### Letter of Transmittal

The Board of Trustees
Employees' Retirement System of Baltimore County
Towson, Maryland 21204

December 29, 2014

The Comprehensive Annual Financial Report of the Employees' Retirement System of Baltimore County, Maryland (the "System") for the year ended June 30, 2014 (FY 2014), is submitted herewith. The System is a Pension Trust Fund included in the financial statements of Baltimore County, Maryland. The System administration is responsible for the accuracy and fairness of the information contained in this report. To the best of our knowledge and belief, the enclosed data are accurate in all material respects and are reported in a manner designed to present fairly the fiduciary net position and changes in the fiduciary net position of the System in conformity with accounting principles generally accepted in the United States of America.

Generally accepted accounting principles require management to provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The MD&A may be found immediately following the report of the independent auditors.

**Plan History.** The System, a defined benefit plan, was established January 1, 1945 by County ordinance. The authority to establish and maintain the System is specified in Section 5-1-101 of the Baltimore County Code. Membership in the System is open to employees in both the classified and unclassified service of Baltimore County, and employees of the Baltimore County Revenue Authority, the Baltimore County Board of Education, the Baltimore County Board of Library Trustees and the Community College of Baltimore County who are not eligible to participate in the Maryland State Retirement and Pension Systems. Direct appointees of the Governor of Maryland, temporary employees and employees for whom there are existing pension provisions are excluded. System membership is compulsory for general County classified employees after two years of service if hired prior to January 1, 2014, and after sixty days of service if hired on or after January 1, 2014. Immediate membership is mandatory for police officers and firefighters as a condition of employment. Membership is optional for part-time employees. Selection of the option must be made within two years of employment if hired prior to January 1, 2014, or sixty days if hired on or after January 1, 2014.

**Benefits and Services Provided.** The System provides normal service retirement and discontinued service retirement benefits for members who attain the age and service requirements. Coverage for occupational disability benefits is immediate upon entry into the System. Disability benefits for non-occupational related injury or illness are provided to vested members. Members hired prior to July 1, 2007 are vested after five years of creditable service. Members hired on or after July 1, 2007 are vested after ten years of creditable service. Ordinary Disability benefits are provided to Police Officers and Firefighters after five years of creditable service if hired prior to July 1, 2007, and after ten years of creditable service for all other members. Occupational death benefits are provided upon membership for any member whose death results from an injury occurring in the actual performance of their job.

## Letter of Transmittal, continued

Post-Retirement Cost-of-Living Adjustments (COLAs) are granted annually to members who have been retired for more than 60 months, provided sufficient excess investment earnings exist in the Post Retirement Increase Fund. For active members who select the DROP program, the eligibility period to receive COLAs in the DROP remains a minimum of 12 months. Once the member actually retires, the eligibility period for a post-retirement COLA is a minimum of 48 months. Beginning July 1, 2010, a member hired prior to July 1, 2007 must have 20 years of creditable service to qualify for COLAs. A member hired on or after July 1, 2007 must have 25 years of creditable service to qualify for COLAs.

The staff makes benefit presentations at new employee orientations and retirement seminars.

**INVESTMENT PERFORMANCE**

The System's investment portfolio rate of return, gross of fees, was 14.8% in FY 2014 and 10.7% in FY 2013. The Comparative Balanced Index was 14.7% and 9.4% respectively, for the same periods.

**FUNDING STATUS**

For actuarial valuation purposes, returns were smoothed over a ten-year period. The actuarially determined target investment return is a long-term target and significant deviations from this target can be expected. The actuarial cost method applied is projected unit credit. Based on the latest available actuarial reports, the funded status for FY 2013 and FY 2012 were 71.8%, and 78.7%, respectively. The funded ratio decreased from 78.7% as of June 30, 2012 to 71.8% as of June 30, 2013, primarily due to the lowering of the interest rate from 7.25% to 7.00% and the changes in demographic assumptions, adopted as a result of the July 1, 2006 – June 30, 2011 experience study.

**INVESTMENT STRATEGIES**

Under the experienced direction of its Board of Trustees, the System plans to continue maximizing investment returns while maintaining an acceptable level of risk. The System will continue to invest assets domestically as well as internationally in an effort to maintain an appropriate balance.

During FY 2014, the Trustees conducted an annual asset allocation review. The review confirmed that the existing investment allocation remained appropriate and no changes were made to the target allocations. Two new private equity commitments were made. Two new hedge fund-of-fund managers and a fixed income manager were hired. The Board implemented these changes to better meet the System's long-term risk and return objectives.

**MAJOR ISSUES AND INITIATIVES**

LEGISLATIVE AND ADMINISTRATIVE CHANGES

*Reduction in Valuation Rate:*
The valuation interest rate was changed from 7.25% to 7.00% as of June 30, 2013. This lower rate of 7.00% was used in the assumptions for GASB 67 implementation. In addition, the salary scale assumption and several demographic assumptions were changed as a result of the July 1, 2006 – June 30, 2011 experience study (adopted by the Board at its January 2014 meeting).

*Benefits:*
On September 3, 2013 County Council passed Bill No. 46-13 that clarified the members and beneficiaries nonforfeitability clause to comply with Section 411 of the IRS Code.

On November 4, 2013, the County Council passed Bill No. 59-13 that provided a line of duty death benefit for children for up to five years after reaching age eighteen. The child must attend school on a full-time basis and the school offers an educational or vocational program accredited or approved by the State.

## Letter of Transmittal, continued

LEGISLATIVE AND ADMINISTRATIVE CHANGES, continued

On November 18, 2013, the County Council passed Bill No. 61-13 which requires full time classified employees (other than Police and Firefighters) to join the retirement system within 60 days of employment if hired on or after January 1, 2014. Selection of the option to join the System, may be made by part-time employees hired on or after January 1, 2014 within sixty days of employment or forfeit their right to become a member.

*Contributions:*
On April 21, 2014, the County Council passed Bill No. 25-14 which increased the rate of regular contribution for sworn members of the Police Department on pay schedule IV, hired on or after July 1, 2014 from 8% to 10% of earnable compensation, effective July 1, 2014.

*Data Processing:*
The System implemented a new software system, CPAS, on August 1, 2013, to replace the current pension administration software system. CPAS is highly configurable and provides full support for the County's defined benefit plan.

*Governmental Accounting Standards Board (GASB) Statement No. 67– New Implementation:*
For the year ended June 30, 2014, the System adopted Statement No. 67 of the Governmental Accounting Standards Board. The objective of this Statement is to improve financial reporting by state and local governmental pension plans. This Statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for pensions with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity, and creating additional transparency. This Statement replaces the requirements of Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, and No. 50, *Pension Disclosures*, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet certain criteria. GASB Statement No.67 required changes in presentation of the financial statements, notes to the financial statements and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures.

### FINANCIAL INFORMATION

**Accounting System.** The System's financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America. Accordingly, contributions and investment income are recorded when earned regardless of the date of collection and benefits and other expenses are recorded when liabilities are incurred regardless of when payment is made.

**Internal Control.** In developing and evaluating the accounting system, consideration is given to the adequacy of internal accounting controls. Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against loss from unauthorized use or disposition and the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived; and the evaluation of cost and benefits requires estimates and judgments by management. All internal control evaluations occur within this framework. Management believes the System's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

**Investments.** As provided in Article 5, Title 1 of the Baltimore County Code, the Board of Trustees is empowered to invest the System's assets utilizing the "prudent person" standard and to take appropriate action regarding the investment, management and custodianship of plan assets. The investment responsibilities include establishing reasonable investment objectives, developing investment policy guidelines, selecting investment managers and evaluating performance results to ensure adherence to guidelines and the achievement of objectives.

## Letter of Transmittal, continued

The Board of Trustees has carefully exercised these responsibilities by diversifying the assets into stocks (domestic and foreign), fixed income securities, private equity funds, real estate funds, global asset allocation funds, hedge fund of funds and real assets (i.e. commodities). The Board of Trustees recognizes that the objective of a sound and prudent policy is to produce investment results which will preserve the System's assets and to maximize the earnings of the System consistent with its long-term needs.

A pension investment consultant has been appointed to advise and consult with the Board of Trustees and the System staff, prepare recommendations on investment policies, investment management structure and asset allocation, and to monitor and evaluate the performance of the investment managers and the asset custodian. For the fiscal year ended June 30, 2014, the System portfolio rate of return was 14.8% gross of fees. The System had an annualized rate of return of 9.0% over the past three years, and an annualized rate of return of 12.8% over the past five years.

**Administration.** As provided in Section 5-1-238 of the Baltimore County Code, the general administration of the System is vested in the Director of Budget and Finance of Baltimore County. The Director has the responsibility to implement policies of the Board of Trustees as they pertain to the System and to ensure the System operates within the guidelines as set forth in those policies.

**Funding.** A pension plan is considered adequately funded when sufficient assets are available to meet all expected future obligations to participants. The System funding objective is to meet long-term benefits through annual employer contributions that remain approximately level as a percentage of covered payrolls. The greater the level of funding, the larger the ratio of assets accumulated to the actuarial accrued liability and the greater the level of investment potential. The advantage of a well-funded plan is that participants are confident that sufficient assets are available for the payment of current and future member benefits. The County's commitment to provide a financially sound retirement System for its members is illustrated in the schedules contained in the required supplementary information of the Financial Section of this report.

**OTHER INFORMATION**

**Independent Audit.** The County has contracted with a firm of independent certified public accountants to audit the System's financial statements. The independent auditors' report is contained herein.

**Professional Services.** The Board of Trustees has appointed an actuary, a pension investment consultant, an asset custodian, a medical board and numerous investment managers to provide services to the System. The list of professionals which provide services to the System is found on Pages 8 through 10.

**Certificate of Achievement.** The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Employees' Retirement System of Baltimore County for its comprehensive annual financial report for the fiscal year ended June 30, 2013. This was the twentieth consecutive year that the System 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 our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to GFOA to determine its eligibility for another certificate.

## Letter of Transmittal, continued

**ACKNOWLEDGMENTS**

The preparation of this report on a timely basis reflects the combined effort and dedication of the System's staff. On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff who have worked so diligently to assure the successful operation of the System. This report is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions and for determining responsible stewardship for the assets of the System.

Respectfully submitted,

Keith Dorsey
Director of Budget and Finance and
Secretary to the Board of Trustees
Employees' Retirement System of Baltimore County

## Board of Trustees



The Ex-officio trustees serve by virtue of their position with Baltimore County.

## Consultants and Professional Services

Actuary
Buck Consultants, a Xerox Company
Chicago, Illinois

Auditors
CliftonLarsonAllen, LLP
Baltimore, Maryland

Pension Investment Consultant
NEPC, LLC
Cambridge, Massachusetts

EDP Consultant
CPAS Systems, Inc.
Toronto, Ontario, Canada

Asset Custodian
BNY Mellon
Pittsburgh, Pennsylvania

Medical Board
Rubin Reider, M.D.
Jose Morelos, M.D.

Operational Banking
M & T Bank
Buffalo, New York

## Investment Managers

**Domestic Equity**

Brown Advisory
Baltimore, Maryland

BlackRock
San Francisco, California

Apex Capital Management
Dayton, Ohio

Brown Capital Management
Baltimore, Maryland

Earnest Partners
Atlanta, Georgia

Channing Capital Management
Atlanta, Georgia

Benchmark Plus Management
Tacoma, Washington

Nicholas Asset Management
Boston, Massachusetts

Profit Investment Management
Silver Spring, Maryland

Herndon Capital Management
Atlanta, Georgia

Decatur Capital Management
Decatur, Georgia

**International Equity**

Gryphon International Investment Corporation
Toronto, Ontario, Canada

LSV Asset Management
Chicago, Illinois

BlackRock
San Francisco, California

Mondrian Investment Partners
Wilmington, Delaware

## Investment Managers, continued

### Fixed Income

Pacific Investment Management Co.
Newport Beach, California

Reams Asset Management
Columbus, Indiana

Earnest Partners
Atlanta, Georgia

Western Asset Management
Pasadena, California

Seix Advisors
Upper Saddle River, New Jersey

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

Stone Harbor Investment Partners
New York, New York

Garcia Hamilton & Associates
Houston, Texas

### Private Equity

HarbourVest Partners, Inc.
Boston, Massachusetts

Siguler Guff
New York, New York

Edison Venture Fund
Lawrenceville, New Jersey

Grotech Capital Group
Timonium, Maryland

Mesirow Financial
Chicago, Illinois

Newstone Capital Partners
Los Angeles, California

Crescent Mezzanine Partners
Los Angeles, California

Paul Capital Partners
San Francisco, California

Energy Spectrum Partners
Dallas, Texas

EIG Global Energy Partners
Washington, District of Columbia

Landmark Equity Partners
Simsbury, Connecticut

Lexington Capital Partners
New York, New York

Vista Equity
San Francisco, California

Sterling Capital
Baltimore, Maryland

Private Advisors
Richmond, Maryland

CCMP Capital Advisors, LLC
New York, New York

## Investment Managers, continued

### Real Estate

ING Clarion
New York, New York

Aslan Realty Partners
Chicago, Illinois

UBS Global Asset Management
Hartford, Connecticut

JP Morgan
New York, New York

### Hedge Fund of Funds

EIM Management
New York, New York

Federal Street Partners
Stamford, Connecticut

Permal Group
London, United Kingdom

Cube Capital
New York, New York

### Global Asset Allocation

Bridgewater
Westport, Connecticut

Mellon Capital Management
San Francisco, California

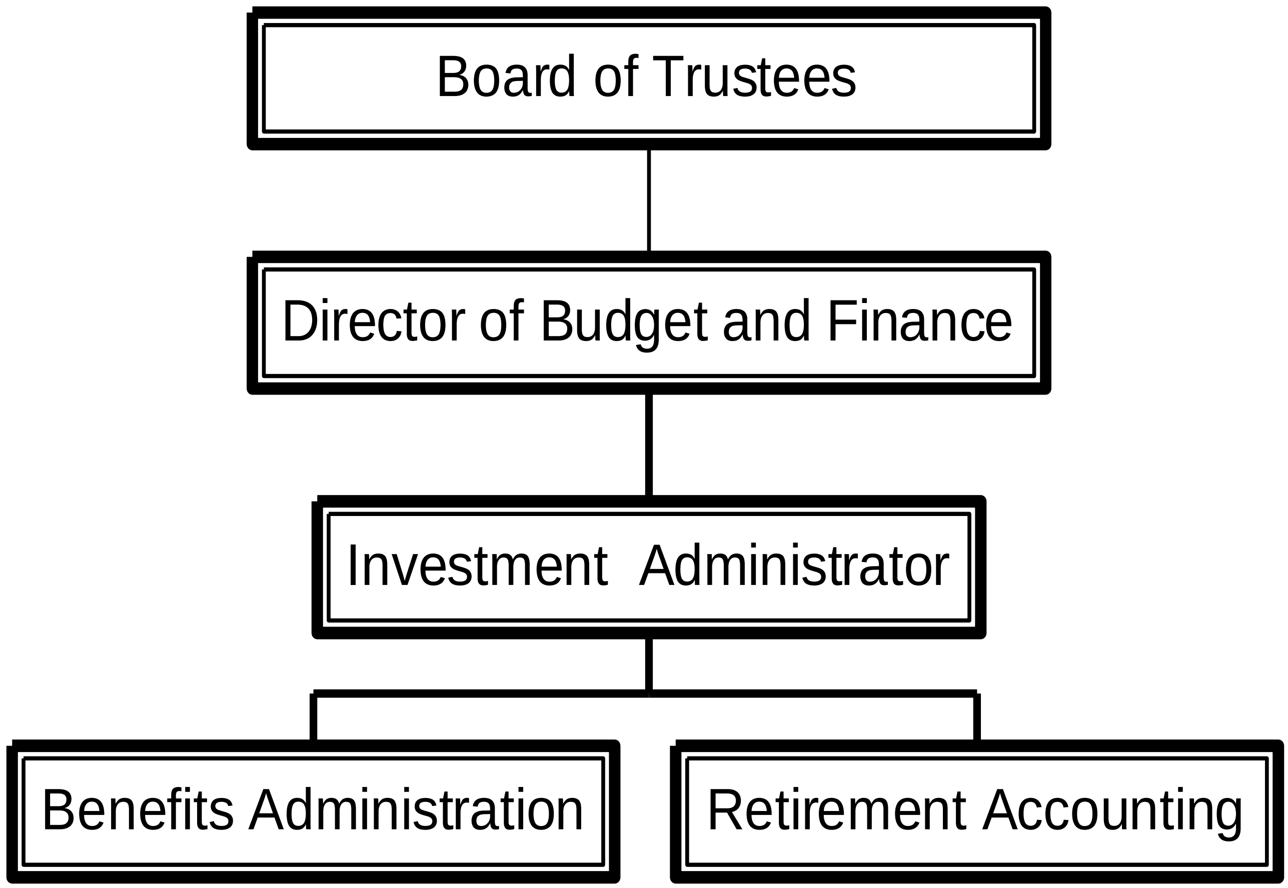
Wellington Trust Company, NA
Boston, Massachusetts

### Real Assets

Gresham Investment Management
New York, New York

Wellington Trust Company, NA
Boston, Massachusetts

# Administrative Organizational Chart



# FINANCIAL SECTION

CliftonLarsonAllen

CliftonLarsonAllen LLP
www.CLAconnect.com

**INDEPENDENT AUDITORS' REPORT**

The Honorable County Executive and
Members of County Council
Baltimore County, Maryland

**Report on the Financial Statements**

We have audited the accompanying financial statements of fiduciary net position of the Employees' Retirement System of Baltimore County, Maryland (the System), as of June 30, 2014 and 2013, and the related changes in fiduciary net position for the years then ended and the related notes to the financial statements, as listed in the table of contents, which collectively comprise the System's basic financial statements.

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

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

***Auditors' Responsibility***

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2014 and 2013, and the respective changes in financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

***Other Matters***

*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, and the schedules of changes in net pension liability and related ratios, employer contributions and investment returns and related notes, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*Other Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The introductory section, supplementary information and supporting schedules, investment section, actuarial section, and statistical section, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

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

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

In accordance with *Government Auditing Standards*, we have also issued our report dated December 29, 2014 on our consideration of the Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

*CliftonLarsonAllen LLP*

**CliftonLarsonAllen LLP**

Baltimore, Maryland
December 29, 2014

## Management's Discussion and Analysis

Our discussion and analysis of the financial performance of the Employees' Retirement System of Baltimore County (the "System") provides an overview of financial activities for the fiscal years ended June 30, 2014 (FY 2014) and June 30, 2013 (FY 2013). Please read it in conjunction with the transmittal letter in the Introductory Section beginning on Page 2 and the basic financial statements, which follow this discussion.

### FINANCIAL HIGHLIGHTS

- The System's net position restricted for pensions at the close of FY 2014 and FY 2013 were $2.5 billion and $2.3 billion, respectively. This increase was due to improved investment performance with the System's investment portfolio returning 14.8% for FY 2014 and 10.7% for FY 2013.

- Contributions (excluding the Pension Obligation Bonds) for FY 2014 and FY 2013 were $118.3 million and $111.0 million, respectively, an increase of 6.6%. This increase was a result of higher employer contributions primarily due to asset experience, decrease in interest rate assumption, scheduled increase in unfunded accrued liability contributions and experience losses.

- Net investment income of $327.3 million resulted in a gross of fee return of 14.8% for FY 2014 vs. $198.9 million for FY 2013 with gross of fee returns of 10.7%. The Comparative Balanced Index was 14.7% and 9.4% respectively, for the same periods.

- Total deductions decreased from $237.8 million in FY 2013 to $230.2 million in FY 2014, a decrease of 3.2%. The decrease was primarily due to a decrease in DROP benefit payments.

- The System's Total Pension Liability was $3.7 billion for FY 2014. The Fiduciary Net Position of $2.5 billion, as a percentage of Total Pension Liability was 68.20% as of June 30, 2014.

- Covered-employee payroll as of June 30, 2014 was $0.5 million. The System had a Net Pension Liability of $1.2 billion for FY 2014. The Net Pension Liability as a percentage of Covered-employee payroll was 232.19% as of June 30, 2014.

- The System's funding objective is to meet long-term benefit obligations through contributions and investment income. Based on the latest actuarial valuations, as of June 30, 2013 and 2012, the funded ratio was 71.8% and 78.7%, respectively. The decrease is primarily due to the lowering of the interest rate from 7.25% to 7.00% and the changes in demographic assumptions, adopted as a result of the July 1, 2006 – June 30, 2011 experience study.

### THE STATEMENT OF FIDUCIARY NET POSITION AND THE STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

This Comprehensive Annual Financial Report (CAFR) consists of two financial statements: The Statement of Fiduciary Net Position (Page 22) and the Statement of Changes in Fiduciary Net Position (Page 23). These financial statements report information about the System as a whole, and about its financial condition that should help answer the question: Is the System, as a whole, better or worse off as a result of this year's activities? These statements include all assets and liabilities that are due and payable using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, all revenues and expenses are taken into account regardless of when cash is received or paid.

The Statement of Fiduciary Net Position presents all of the System's assets and liabilities, with the difference between the two reported as the net position. Over time, increases and decreases in the net position measure whether the System's assets available for benefits is improving or deteriorating. The Statement of Changes in Fiduciary Net Position presents how the System's net position changed during the most recent fiscal year. These two financial statements should be reviewed along with the Notes to the Financial Statements, and the Required Supplementary Information (RSI), including, the Schedule of Changes in Net Pension Liability, the Schedule of County Contributions,

## Management's Discussion and Analysis

the Schedule of Investment Returns, and the Notes to the RSI, to determine whether the System is becoming financially stronger or weaker and to understand changes over time in the funded status of the System.

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**FINANCIAL ANALYSIS**

The System's overall funding objective is to accumulate sufficient assets over time to meet its long-term benefit obligations as they become due. In FY 2014, the net position restricted for pension benefits increased 9.3% over FY 2013

Total liabilities that are due and payable as of June 30, 2014 and 2013 were $83.6 million and $105.4 million respectively, a decrease of 20.6% over FY 2013, and were comprised of payables for investment purchases, investment expenses, refunds payable, DROP payable and securities lending obligations. Total liabilities that were due and payable as of June 30, 2013 and 2012 were $105.4 million and $60.6 million respectively, an increase of 73.8% over FY 2012, and were comprised of payables for investment purchases, investment expenses, refunds payable and securities lending obligations.

The System's assets exceeded its due and payable liabilities at the close of fiscal year 2014 and 2013 by $2.5 billion and $2.3 billion, respectively. In FY 2014, the net position held in trust for pension benefits increased 9.3% or $215 million from the previous year. In FY 2013, the net position held in trust for pension benefits increased 16.4% or $327 million from the previous year. This increase was due to the County contribution resulting from the issuance of Pension Obligation Bonds of $255 million and the favorable net investment gains of $198.9 million, which was partially offset by an increase in benefit payments. In FY 2012, the net position held in trust for pension benefits decreased 4.2% or $87.7 million from the previous year. This decrease was attributable to the increase in benefit payments due to the increased number of retirees due to the retirement incentive program, increased DROP payments and the relatively lower investments returns. Below are the statements of Fiduciary Net Position and Changes in Fiduciary Net Position for the System, Plan A and Plan B.

**BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM**
**FIDUCIARY NET POSITION**
**AS OF JUNE 30, 2014, 2013 AND 2012**
(IN THOUSANDS)

**THE SYSTEM**

| | FY 2014 | FY 2013 | FY 2012 | 2014-2013 % Change | 2013-2012 % Change |
|---|---|---|---|---|---|
| **Assets** | | | | | |
| Cash and Short Term Investments | $ 32,423 | $ 75,121 | $ 42,460 | -56.8% | 76.9% |
| Collateral for Loaned Securities | 27,365 | 28,482 | 22,676 | -3.9% | 25.6% |
| Receivables | 41,605 | 48,015 | 17,166 | -13.3% | 179.7% |
| Investments | 2,521,017 | 2,277,153 | 1,974,605 | 10.7% | 15.3% |
| **Total Assets** | 2,622,410 | 2,428,771 | 2,056,907 | 8.0% | 18.1% |
| **Liabilities** | | | | | |
| Accounts Payable and Other Accrued Liabilities | 56,279 | 75,387 | 35,871 | -25.3% | 110.2% |
| Obligations Under Securities Lending | 27,365 | 30,004 | 24,778 | -8.8% | 21.1% |
| **Total Liabilities** | 83,644 | 105,391 | 60,649 | -20.6% | 73.8% |
| **Net Position Restricted for Pensions** | $ 2,538,766 | $ 2,323,380 | $ 1,996,258 | 9.3% | 16.4% |

## Management's Discussion and Analysis, continued

### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM
### FIDUCIARY NET POSITION
### AS OF JUNE 30, 2014, 2013 AND 2012
(IN THOUSANDS)

### PLAN A

| | FY 2014 | FY 2013 | FY 2012 | 2014-2013 % Change | 2013-2012 % Change |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| Cash and Short Term Investments | $ 29,900 | $ 73,499 | $ 38,963.00 | -59.3% | 88.6% |
| Collateral for Loaned Securities | 27,010 | 28,195 | 22,528 | -4.2% | 25.2% |
| Receivables | 40,957 | 47,362 | 17,054 | -13.5% | 177.7% |
| Investments | 2,488,278 | 2,254,208 | 1,961,731 | 10.4% | 14.9% |
| **Total Assets** | 2,586,145 | 2,403,264 | 2,040,276 | 7.6% | 17.8% |
| **LIABILITIES** | | | | | |
| Accounts Payable and | | | | | |
| Other Accrued Liabilities | 54,955 | 74,225 | 35,428 | -26.0% | 109.5% |
| Obligations Under Securities Lending | 27,010 | 29,702 | 24,616 | -9.1% | 20.7% |
| **Total Liabilities** | 81,965 | 103,927 | 60,044 | -21.1% | 73.1% |
| **Net Position Restricted for Pensions** | $ 2,504,180 | $ 2,299,337 | $ 1,980,232.00 | 8.9% | 16.1% |

### PLAN B

| | FY 2014 | FY 2013 | FY 2012 | 2014-2013 % Change | 2013-2012 % Change |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| Cash and Short Term Investments | $ 2,523 | $ 1,622 | $ 3,497 | 55.5% | -53.6% |
| Collateral for Loaned Securities | 355 | 287 | 148 | 23.7% | 93.9% |
| Receivables | 648 | 653 | 112 | -0.8% | 483.0% |
| Investments | 32,739 | 22,945 | 12,874 | 42.7% | 78.2% |
| **Total Assets** | 36,265 | 25,507 | 16,631 | 42.2% | 53.4% |
| **LIABILITIES** | | | | | |
| Accounts Payable and | | | | | |
| Other Accrued Liabilities | 1,324 | 1,162 | 443 | 13.9% | 162.3% |
| Obligations Under Securities Lending | 355 | 302 | 162 | 17.5% | 86.4% |
| **Total Liabilities** | 1,679 | 1,464 | 605 | 14.7% | 142.0% |
| **Net Position Restricted for Pensions** | $ 34,586 | $ 24,043 | $ 16,026 | 43.9% | 50.0% |

## Management's Discussion and Analysis, continued

### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM
### CHANGES IN FIDUCIARY NET POSITION
### FOR THE FISCAL YEARS ENDED JUNE 30, 2014, 2013 AND 2012
(IN THOUSANDS)

**THE SYSTEM**

| | FY 2014 | FY 2013 | FY 2012 | 2014-2013 % Change | 2013-2012 % Change |
|---|---|---|---|---|---|
| **ADDITIONS** | | | | | |
| Contributions: | | | | | |
| Intergovernmental | - | $ 255,000 | - | -100.0% | 100.0% |
| Employers | $ 80,454 | 73,362 | $ 65,127 | 9.7% | 12.6% |
| Members | 37,844 | 37,682 | 39,481 | 0.4% | -4.6% |
| Total Contributions | 118,298 | 366,044 | 104,608 | -67.7% | 249.9% |
| Investment Income | 327,033 | 198,535 | 22,766 | 64.7% | 772.1% |
| Gain from Securities Lending | 231 | 357 | 555 | -35.3% | -35.7% |
| Net Investment Income | 327,264 | 198,892 | 23,321 | 64.5% | 752.8% |
| **Total Additions** | 445,562 | 564,936 | 127,929 | -21.1% | 341.6% |
| **DEDUCTIONS** | | | | | |
| Benefits | 225,668 | 232,410 | 209,673 | -2.9% | 10.8% |
| Refunds of Contributions | 3,166 | 3,110 | 3,640 | 1.8% | -14.6% |
| Administrative Expenses | 1,342 | 2,294 | 2,329 | -41.5% | -1.5% |
| **Total Deductions** | 230,176 | 237,814 | 215,642 | -3.2% | 10.3% |
| **Net Increase (Decrease)** | 215,386 | 327,122 | (87,713) | -34.2% | -472.9% |
| Net Position Restricted for Pension Benefits | | | | | |
| Beginning of Year | 2,323,380 | 1,996,258 | 2,083,971 | 16.4% | -4.2% |
| End of Year | $ 2,538,766 | $ 2,323,380 | $ 1,996,258 | 9.3% | 16.4% |

## Management's Discussion and Analysis, continued

### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM
### CHANGES IN FIDUCIARY NET POSITION
### FOR THE FISCAL YEARS ENDED JUNE 30, 2014, 2013 AND 2012
(IN THOUSANDS)

**PLAN A**

| | FY 2014 | FY 2013 | FY 2012 | 2014-2013 % Change | 2013-2012 % Change |
|---|---|---|---|---|---|
| **ADDITIONS** | | | | | |
| Contributions | | | | | |
| Intergovernmental | - | $ 255,000 | - | -100.0% | 100.0% |
| Employers | $ 80,127 | 72,894 | $ 64,887 | 9.9% | 12.3% |
| Members | 29,860 | 30,643 | 33,741 | -2.6% | -9.2% |
| Total Contributions | 109,987 | 358,537 | 98,628 | -69.3% | 263.5% |
| Investment Income | 323,392 | 196,988 | 22,618 | 64.2% | 770.9% |
| Gain from Security Lending | 228 | 353 | 551 | -35.4% | -35.9% |
| Net Investment Income | 323,620 | 197,341 | 23,169 | 64.0% | 751.7% |
| **Total Additions** | 433,607 | 555,878 | 121,797 | -22.0% | 356.4% |
| **Deductions** | | | | | |
| Benefits | 225,668 | 232,410 | 209,673 | -2.9% | 10.8% |
| Refunds of Contributions | 1,770 | 2,085 | 2,967 | -15.1% | -29.7% |
| Administrative Expenses | 1,326 | 2,278 | 2,320 | -41.8% | -1.8% |
| **Total Deductions** | 228,764 | 236,773 | 214,960 | -3.4% | 10.1% |
| **Net Increase (Decrease)** | 204,843 | 319,105 | (93,163) | -35.8% | -442.5% |
| Net Position Restricted for Pension Benefits | | | | | |
| Beginning of Year | 2,299,337 | 1,980,232 | 2,073,395 | 16.1% | -4.5% |
| End of Year | $ 2,504,180 | $ 2,299,337 | $ 1,980,232 | 8.9% | 16.1% |

## Management's Discussion and Analysis, continued

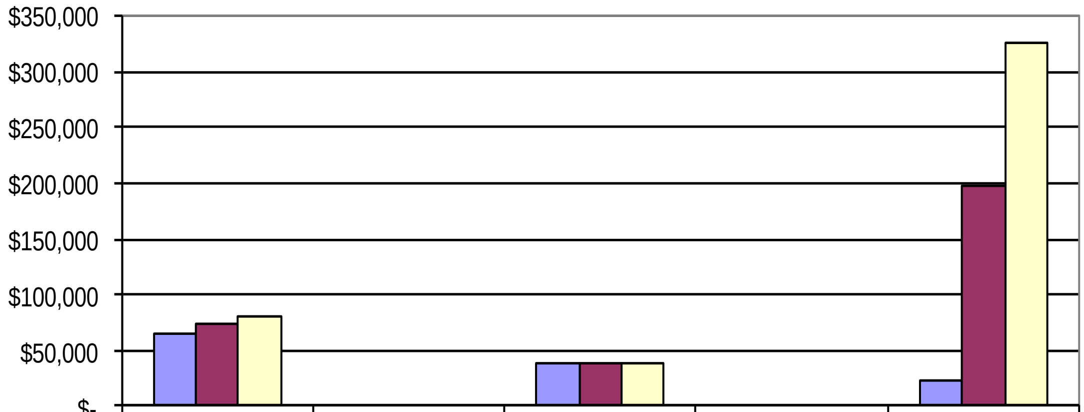
### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM
### CHANGES IN FIDUCIARY NET POSITION
### FOR THE FISCAL YEARS ENDED JUNE 30, 2014, 2013 AND 2012
(IN THOUSANDS)

**PLAN B**

| | FY 2014 | FY 2013 | FY 2012 | 2014-2013 % Change | 2013-2012 % Change |
|---|---|---|---|---|---|
| **ADDITIONS** | | | | | |
| Contributions | | | | | |
| Employers | $ 327 | $ 468 | $ 240 | -30.1% | 95.0% |
| Members | 7,984 | 7,039 | 5,740 | 13.4% | 22.6% |
| Total Contributions | 8,311 | 7,507 | 5,980 | 10.7% | 25.5% |
| Investment Income | 3,641 | 1,547 | 148 | 135.4% | 945.3% |
| Gain from Security Lending | 3 | 4 | 4 | -25.0% | 0.0% |
| Total Net Investment Income | 3,644 | 1,551 | 152 | 134.9% | 920.4% |
| **Total Additions** | 11,955 | 9,058 | 6,132 | 32.0% | 47.7% |
| **Deductions** | | | | | |
| Refunds of Contributions | 1,396 | 1,025 | 673 | 36.2% | 52.3% |
| Administrative Expenses | 16 | 16 | 9 | 0.0% | 77.8% |
| **Total Deductions** | 1,412 | 1,041 | 682 | 35.6% | 52.6% |
| **Net Increase** | 10,543 | 8,017 | 5,450 | 31.5% | 47.1% |
| Net Position Restricted for Pension Benefits | | | | | |
| Beginning of Year | 24,043 | 16,026 | 10,576 | 50.0% | 51.5% |
| End of Year | $ 34,586 | $ 24,043 | $ 16,026 | 43.9% | 50.0% |

## Management's Discussion and Analysis, continued

**THE SYSTEM**




| | Employers Contributions | | Member Contributions | | Net Investment Income |
|---|---|---|---|---|---|
| 2012 | $65,127 | | $39,481 | | $23,321 |
| 2013 | $73,362 | | $37,682 | | $198,892 |
| 2014 | $80,454 | | $37,844 | | $327,264 |

**REVENUES – ADDITIONS TO FIDUCIARY NET POSITION**

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and earnings on investments. Contributions and net investment income for fiscal years 2014 and 2013 were $445.6 million and $564.9 million, respectively.

Additions for FY 2014 decreased by $119.3 million over FY 2013. Employer contributions for FY 2014 increased over FY 2013 by $7.1 million or 9.7%.

Additions for FY 2013 increased by $437 million over FY 2012, due primarily to the contribution from Pension Obligation Bonds of $255 million, and gains in investments of $198.9 million. Employer contributions (excluding the contribution from Pension Obligation Bonds) for FY 2013 increased over FY 2012 by $8.2 million or 12.6%.

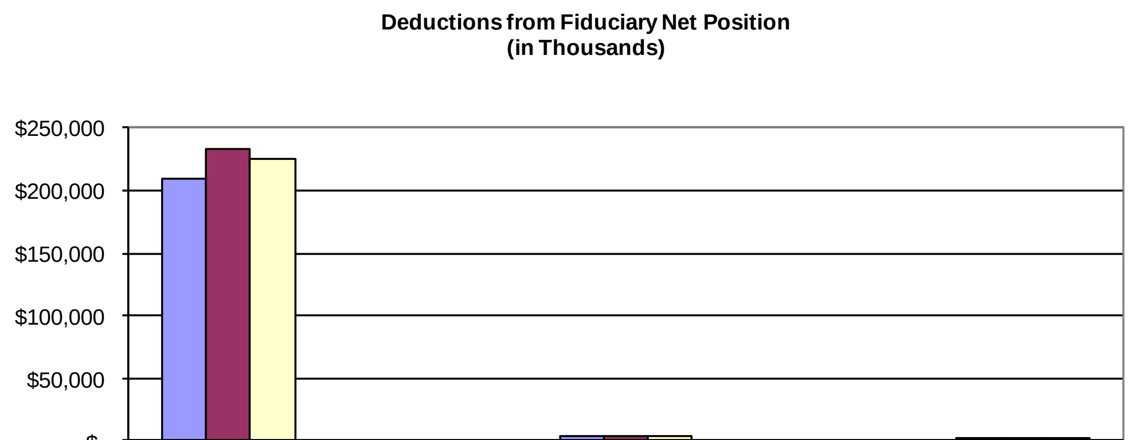
The overall System portfolio returned 14.7% for FY 2014. Contributing to these favorable returns were gains from the US Equity portfolio of 25.9%, the non-US Equity Portfolio of 17.8%, the Global Asset Allocation portfolio of 15.5%, and the Real Estate portfolio of 12.7%.

## Management's Discussion and Analysis, continued

### EXPENSES – DEDUCTIONS FROM FIDUCIARY NET POSITION

The expenses of the System include pension payments to members and beneficiaries, refunds of contributions to former members, and the cost of administering the System. Total deductions for FY 2014 decreased by 0.3% or $7.6 million over FY 2013 due to a decrease in benefit payments. Total deductions for FY 2013 increased by 10.3% or $22.2 million over FY 2012 due to an increase in benefit payments.

**THE SYSTEM**




| | Pension Benefits | | Refunds | | Administrative Expenses |
|---|---|---|---|---|---|
| 2012 | $209,673 | | $3,640 | | $2,329 |
| 2013 | $232,410 | | $3,110 | | $2,294 |
| 2014 | $225,668 | | $3,166 | | $1,342 |

### RETIREMENT SYSTEM AS A WHOLE

The net position held in trust for pension benefits increased by $215.4 million or 9.3% in FY 2014. Based on the latest actuarial valuation available, the System's funding ratio, as determined by the County's actuary, was 71.8% at June 30, 2013 and 78.7% at June 30, 2012. The Board continues to utilize the concepts of prudent investment management, cost controls and strategic planning.

### CONTACTING SYSTEM FINANCIAL MANAGEMENT

This financial report is designed to provide the Retirement Board, our membership, taxpayers, investors, and creditors with a general overview of the System's finances and to demonstrate the System's accountability for the money it receives. If you have any questions about this report or need additional financial information, please contact the Office of Budget and Finance, Mezzanine, Historic Court House, 400 Washington Avenue, Towson, Maryland 21204.

# Employees' Retirement System of Baltimore County
## Statements of Fiduciary Net Position
## As of June 30, 2014 and 2013
## (IN THOUSANDS)

| | FY 2014 | | | FY 2013 | | |
|---|---|---|---|---|---|---|
| | Plan A | Plan B | The System | Plan A | Plan B | The System |
| ***Assets:*** | | | | | | |
| Cash and short term investments | $ 29,900 | $ 2,523 | **$ 32,423** | $ 73,499 | $ 1,622 | **$ 75,121** |
| Collateral for loaned securities | 27,010 | 355 | **27,365** | 28,195 | 287 | **28,482** |
| Receivables: | | | | | | |
| Accrued interest and dividend income | 2,313 | 31 | **2,344** | 2,769 | 28 | **2,797** |
| Receivable for investments sold | 38,384 | 505 | **38,889** | 43,693 | 445 | **44,138** |
| Receivables - other | 260 | 112 | **372** | 900 | 180 | **1,080** |
| Total Receivables | 40,957 | 648 | **41,605** | 47,362 | 653 | **48,015** |
| Investments, at fair value | | | | | | |
| U.S. Government and agency securities | 147,832 | 1,945 | **149,777** | 155,758 | 1,585 | **157,343** |
| Municipal Bonds | 5,152 | 68 | **5,220** | 16,171 | 165 | **16,336** |
| Foreign bonds | 18,103 | 238 | **18,341** | 14,327 | 146 | **14,473** |
| Corporate bonds | 113,862 | 1,498 | **115,360** | 124,581 | 1,268 | **125,849** |
| Stocks | 565,070 | 7,435 | **572,505** | 511,825 | 5,210 | **517,035** |
| Bond mutual funds | 368,502 | 4,849 | **373,351** | 301,393 | 3,068 | **304,461** |
| Stock mutual funds | 440,659 | 5,798 | **446,457** | 394,524 | 4,016 | **398,540** |
| Real estate equity funds | 103,306 | 1,359 | **104,665** | 94,974 | 967 | **95,941** |
| Hedge funds | 115,784 | 1,523 | **117,307** | 106,667 | 1,086 | **107,753** |
| Private equity funds | 112,662 | 1,482 | **114,144** | 106,631 | 1,085 | **107,716** |
| Real Assets | 122,066 | 1,606 | **123,672** | 105,945 | 1,078 | **107,023** |
| Global Asset Allocation | 375,280 | 4,938 | **380,218** | 321,412 | 3,271 | **324,683** |
| Total Investments | 2,488,278 | 32,739 | **2,521,017** | 2,254,208 | 22,945 | **2,277,153** |
| **Total Assets** | 2,586,145 | 36,265 | **2,622,410** | 2,403,264 | 25,507 | **2,428,771** |
| ***Liabilities:*** | | | | | | |
| Investment expenses payable | 2,871 | 38 | **2,909** | 3,293 | 34 | **3,327** |
| Refunds payable | 22 | 673 | **695** | 134 | 409 | **543** |
| Payable for investments purchased | 46,579 | 613 | **47,192** | 70,632 | 719 | **71,351** |
| Payable for collateral for loaned securities | 27,010 | 355 | **27,365** | 29,702 | 302 | **30,004** |
| Payables - other | 5,483 | - | **5,483** | 166 | - | **166** |
| **Total Liabilities** | 81,965 | 1,679 | **83,644** | 103,927 | 1,464 | **105,391** |
| **Net Position Restricted for Pension Benefits** | $ 2,504,180 | $ 34,586 | **$ 2,538,766** | $ 2,299,337 | $ 24,043 | **$ 2,323,380** |

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

## Employees' Retirement System of Baltimore County
## Statements of Changes in Fiduciary Net Position
## For the Years Ended June 30, 2014 and 2013
### (IN THOUSANDS)

| | FY 2014 | | | FY 2013 | | |
|---|---|---|---|---|---|---|
| | Plan A | Plan B | The System | Plan A | Plan B | The System |
| **Additions** | | | | | | |
| Contributions: | | | | | | |
| Employer – Pension Bonds | - | - | - | $ 255,000 | - | **$ 255,000** |
| Employers | $ 80,127 | $ 327 | **$ 80,454** | 72,894 | $ 468 | **73,362** |
| Members | 29,860 | 7,984 | **37,844** | 30,643 | 7,039 | **37,682** |
| Total contributions | 109,987 | 8,311 | **118,298** | 358,537 | 7,507 | **366,044** |
| Investment Income: | | | | | | |
| Net increase in the fair value of investments | 299,349 | 3,370 | **302,719** | 170,687 | 1,325 | **172,012** |
| Interest and dividends | 42,512 | 502 | **43,014** | 41,523 | 363 | **41,886** |
| | 341,861 | 3,872 | **345,733** | 212,210 | 1,688 | **213,898** |
| Less: Investment expenses | (18,469) | (231) | **(18,700)** | (15,222) | (141) | **(15,363)** |
| Investment Income | 323,392 | 3,641 | **327,033** | 196,988 | 1,547 | **198,535** |
| Securities Lending: | | | | | | |
| Securities Lending Income | 74 | 1 | **75** | 118 | - | **118** |
| Borrower Rebates | 243 | 3 | **246** | 377 | 4 | **381** |
| Agent Fees | (89) | (1) | **(90)** | (142) | - | **(142)** |
| Net Gain from Securities Lending | 228 | 3 | **231** | 353 | 4 | **357** |
| Total Net Investment Income | 323,620 | 3,644 | **327,264** | 197,341 | 1,551 | **198,892** |
| TOTAL ADDITIONS | 433,607 | 11,955 | **445,562** | 555,878 | 9,058 | **564,936** |
| **Deductions** | | | | | | |
| Benefits | 225,668 | - | **225,668** | 232,410 | - | **232,410** |
| Refunds of contributions | 1,770 | 1,396 | **3,166** | 2,085 | 1,025 | **3,110** |
| Administrative expenses | 1,326 | 16 | **1,342** | 2,278 | 16 | **2,294** |
| TOTAL DEDUCTIONS | 228,764 | 1,412 | **230,176** | 236,773 | 1,041 | **237,814** |
| **Net Increase** | 204,843 | 10,543 | **215,386** | 319,105 | 8,017 | **327,122** |
| **Net Position Restricted for Pension Benefits** | | | | | | |
| **Beginning of year** | 2,299,337 | 24,043 | **2,323,380** | 1,980,232 | 16,026 | **1,996,258** |
| **End of year** | $ 2,504,180 | $ 34,586 | **$ 2,538,766** | $ 2,299,337 | $ 24,043 | **$ 2,323,380** |

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

## Notes to Financial Statements

### 1. Plan Description

The Employees' Retirement System of Baltimore County (the "System") is a cost-sharing multiple-employer defined benefit public employee retirement system that acts as a common investment and administrative agent serving five entities including Baltimore County (the "County") and certain employees of the Baltimore County Board of Education, Baltimore County Board of Library Trustees, the Community College of Baltimore County and the Baltimore County Revenue Authority. The System is not an employer. The System provides retirement and disability benefits, cost-of-living adjustments and death benefits to plan members and beneficiaries. The authority to establish and maintain the System is specified in Section 5-1-101 of the Baltimore County Code (the "Code").

Separate Plans:
On October 15, 2012, the County Council passed Bill No. 65-12 that formally closed the System for members hired prior to July 1, 2007, now known as members of "Plan A". Members hired on or after July 1, 2007 are members of "Plan B".

The System is considered part of the Baltimore County, Maryland reporting entity and its financial statements are included in the County's basic financial statements as a pension trust fund. The System is fiscally dependent on the County by virtue of the legislative and executive controls exercised with respect to its operations, policies and administrative budget. In accordance with Section 5-1-238 of the Code, responsibility for the proper operation of the System is vested in an eight-member Board of Trustees (the "Board"), comprised of a combination of ex-officio and elected representatives. The general administration of the System is vested in the Director of Budget and Finance.

Plan Membership: As of June 30, 2014 and 2013, System membership consisted of:

| Membership Status (as of June 30, 2014) | Plan - A* Count | Plan - B Count | Total Count |
|---|---|---|---|
| Inactive plan members or beneficiaries currently receiving benefits | 7,615 | 0 | 7,615 |
| Inactive plan members entitled, but not yet receiving benefits | 449 | 51 | 500 |
| Active plan members | 6,416 | 2,780 | 9,196 |
| Total | 14,480 | 2,831 | 17,311 |

*Plan A is closed to new members hired on or after July 1, 2007.

| Membership Status (as of June 30, 2013) | Plan - A* Count | Plan - B Count | Total Count |
|---|---|---|---|
| Inactive plan members or beneficiaries currently receiving benefits | 7,382 | 0 | 7,382 |
| Inactive plan members entitled, but not yet receiving benefits | 400 | 78 | 478 |
| Active plan members | 6,581 | 2,581 | 9,162 |
| Total | 14,363 | 2,659 | 17,022 |

*Plan A is closed to new members hired on or after July 1, 2007.

## Notes to Financial Statements, continued

The following is a brief description of the System's plan provisions. For a more complete description, see the Summary of Plan Provisions included in the Actuarial Section of this report.

Classified employees, hired on or after January 1, 2014, exclusive of firefighters and police officers, may become System members at any time within the first sixty days of employment. Employees must become System members at the end of the sixty day period as a condition of employment except for elected officials, employees appointed to certain non-merit positions and part-time employees who have the option to join the System within the first sixty days or two years, depending on hire date. Waived time is not eligible for buyback. Section 5-1-203 of the Code provides that System members contribute a percentage of their salary to the System. (See Note 3 for additional information on contribution rates.) Classified employees, exclusive of firefighters and police, hired prior to January 1, 2014 must become member after two years. Part-time employees forfeit their right to join the System, if such employees do not become a member within two years of service, if hired prior to January 1, 2014, or within sixty days of service, if hired on or after January 1, 2014.

Employees who terminate employment or die in service prior to meeting vesting eligibility are entitled to a refund of their contributions. Interest is credited on member contributions at the rate of 5% per annum. Employers are required to contribute an actuarially determined amount annually to finance the System as specified by Sections 5-1-203 and 5-1-257 of the Code.

Members are eligible for a normal retirement for service based on age and/or years of creditable service. There is no mandatory retirement age for general employees, deputy sheriffs and correctional officers. Firefighters and police officers must retire at age 65 unless approved for continuation of service by the Board on an annual basis.

The County has adopted a Back DROP (the election is made at date of retirement) for Police Officers and Firefighters under which eligible active members may elect to receive a lump sum payment at retirement in exchange for a reduced monthly benefit for life. The DROP period is between three and five years, effective with retirements that occurred on or after July 1, 2004. Police Officers and Firefighters hired on or after July 1, 2007 are not eligible to participate in the Back DROP.

The County has adopted a Back DROP (the election is made at date of retirement) for Correctional Officers and Deputy Sheriffs hired prior to July 1, 2007. Eligible active members may elect to receive a lump sum payment at retirement in exchange for a reduced monthly benefit. The Back DROP period is between three and five years, effective with retirements that occur on or after July 1, 2010. Correctional Officers and Deputy Sheriffs hired on or after July 1, 2007 are not eligible to participate in the Back DROP.

The County has adopted a Forward DROP (the election is made at least 5 years prior to the date of retirement) for General Employees hired prior to July 1, 2007. Eligible active members may elect to receive a lump sum payment at retirement in exchange for a reduced monthly benefit. The Forward DROP period is between five and ten years, effective with retirements that occur on or after July 1, 2012. General Employees hired on or after July 1, 2007 are not eligible to participate in the Forward DROP.

An ordinary disability retirement may be granted to a member who can no longer perform their job due to a non-occupational related injury. Police officers and firefighters ("Group 4") hired prior to July 1, 2007 must have 5 years of creditable service while all other members must have ten years of creditable service. All members must be medically certified as incapacitated for continued performance of their duties. The ordinary disability retirement allowance is determined in accordance with Section 5-1-222 of the Code.

An accidental disability retirement may be granted to a member who has been incapacitated for duty as a result of an occupational related injury. Accidental disability payments are tiered (75%, 66.67%, or 50%), based upon the degree of disability. The accidental disability retirement allowance is determined in accordance with Section 5-1-226 of the Code.

## Notes to Financial Statements, continued

An ordinary death benefit is granted as a result of a member's death from non-occupational causes. A member's designated beneficiary or estate receives a lump sum payment of the member's contributions plus interest. Additionally, after one year of creditable service, the member's designated beneficiary or estate may receive a minimum one-time payment equal to 100% of the member's annual earnable compensation. If a member was eligible for a service retirement or had 15 years of creditable service at the time of death, the spouse, if designated as the beneficiary, may receive a retirement allowance based on service years equivalent to a 100% survivorship option (*Option 2*).

An accidental death benefit is granted as the result of death from an occupational related injury. The dependent beneficiary of a general employee may receive an allowance equal to $66^{2}/_{3}$% of average final compensation (AFC) plus the annuity as described below. The dependent beneficiary of a firefighter or police officer may receive an allowance equal to 100% of the annual earnable compensation at the time of death plus the annuity as described below.

Retirement allowances are comprised of an annuity equal to the actuarial equivalent of the accumulated contributions plus a pension which together with the annuity shall provide a total allowance as provided for in the System's plan. The retirement allowance is determined based on the AFC and number of years of creditable service. AFC is defined as the rate of annual earnable compensation during the twelve or thirty-six consecutive calendar months of service, depending upon group and hire date, affording the highest average. The normal retirement for service allowance is determined as follows:

| **Employee designation** | **Allowance formula for Vested Employees** |
|---|---|
| General employees - Plan A<br>(Hired prior to July 1, 2007) | 1.82% of AFC times the number of years of creditable service for:<br>(i) 30 years of creditable service or<br>(ii) Age 65 with 5 years of creditable service or,<br>General employees hired prior to July 1, 2007, retiring at age 60 with less than 30 years of creditable service, will receive a blended benefit, (i.e. 1.82% of AFC times the number of years of creditable service earned prior to July 1, 2007, plus 1.43% of AFC times the number of years of creditable service earned on or after July 1, 2007. |
| General employees – Plan B<br>(Hired on or after July 1, 2007) | 1.43% of AFC times the number of years of creditable service. |
| Appointed officials | 2.5% of AFC times the number of years of creditable service. |
| Elected officials | 5.0% of AFC times the number of years of creditable service.<br>Any Council member who becomes a member of the retirement system on or after February 1, 2010 may not receive a retirement allowance in excess of 60% of the member's AFC. |
| Firefighters | 2.5% of AFC times the number of years of creditable service up to 20 years, plus<br>2.0% of AFC for each year in excess of 20 years, and<br>3.0% of AFC for each year in excess of 30 years for service years on or after July 1, 2007.<br>2.0% of AFC times the number of years of creditable service – if less than 20 years of creditable service. |
| Correctional officers and Deputy Sheriffs | 2.5% of AFC times the number of years of creditable service up to 20 years, plus<br>2.0% of AFC times the number of years of creditable service in excess of 20 years.<br><u>If hired prior to July 1, 2007, with less than 20 years of creditable service at retirement:</u><br>1.82% of AFC times the number of years of creditable service earned prior to July 1, 2007, plus<br>1.43% of AFC times the number of years of creditable service earned after June 30, 2007.<br><u>If hired on or after July 1, 2007, with less than 25 years of creditable service at retirement:</u><br>1.43% of AFC times the number of years of creditable service. |
| Police officers | 2.5% of AFC times the number of years of creditable service up to 20 years, plus<br>2.0% of AFC for each year of creditable service in excess of 20 years, and<br>3.0% of AFC for each year of creditable service over of 25 years. The 3% accrual rate does not apply for years of creditable service earned prior to July 1, 2007.<br>2.0% of AFC times the number of years of creditable service – if less than 20 years of creditable service |

## Notes to Financial Statements, continued

In addition to the maximum retirement allowance, members may select one of six retirement allowance options to provide payments to a beneficiary upon the death of a retired member. A selection of an option reduces the maximum allowance. Police officers and firefighters with at least 25 years of actual service as a sworn Baltimore County Police Officer or sworn Baltimore County Firefighter may select a 7th option that allows 50% of member's retirement to continue to the original beneficiary at no cost to the employee.

In accordance with Section 5-1-235 of the Code, each July 1, post-retirement allowance adjustments may be granted to retirees who have been retired for more than 60 months. Active members hired prior to July 1, 2007 must have at least 20 years of creditable service to be eligible for post-retirement COLAs. Active members hired on or after July 1, 2007 must have at least twenty five (25) years of creditable service to be eligible for post- retirement COLAs. For active members who select the DROP program, the eligibility period to receive COLAs in the DROP remains a minimum of 12 months. Once the member actually retires, the eligibility period for a post-retirement COLA is a minimum of 48 months. The post-retirement allowance adjustment is equal to the increase in the Consumer Price Index - All Urban Consumers (CPI-U) for the previous calendar year, in an amount not to exceed 3%, provided sufficient investment income in excess of valuation requirements has accumulated in the Post-Retirement Increase Fund Balance Account described in Note 2. The maximum Post-Retirement Increase Fund Account Balance is equal to twice the cost of a 3% COLA. Additional details regarding cost-of-living increases may be found in the Summary of Plan Provisions under the heading Post-Retirement Allowance Increases.

**2. Summary of Significant Accounting Policies and Plan Asset Matters**

*Governmental Accounting Standards Board (GASB) Statement No. 67– New Implementation:*
The objective of this Statement is to improve financial reporting by state and local governmental pension plans. This Statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for pensions with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity, and creating additional transparency. This Statement replaces the requirements of Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, and No. 50, *Pension Disclosures*, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet certain criteria. GASB Statement No.67 required changes in presentation of the financial statements, notes to the financial statements and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The System implemented the effects of Statement No. 67 for the reporting period ending June 30, 2014.

*Reclassifications* - Certain 2013 amounts have been reclassified in conformity with the 2014 presentation. These reclassifications had no effect on net position or changes therein.

*Basis of Accounting* - The financial statements of the System are presented using the economic resource measurement focus and the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employers' contributions are recognized when due and a formal commitment to provide the contributions has been made. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

The System records investment purchases and sales on a trade-date basis. These transactions are not finalized until settlement date, which occurs approximately three business days after the trade date. 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.

*Method used to Value Investments* - Plan investments are reported at fair value. Securities traded on national or international exchanges are valued at the last reported sales price at current exchange rates. The fair value of real estate equity funds is based on independent appraisals. The fair value of real assets is based on their closing sales price on the market on which the securities primarily trade or, in the absence of a sale, at their last or most recently reported bid price. The fair value of mutual funds is based on the fair value of the underlying securities. Hedge funds of funds are

## Notes to Financial Statements, continued

valued based on information provided by the respective fund managers. The fair value for alternative investments which include private equity funds is based upon the partnership's most recent available financial information.

*Administrative Costs* - The System pays for the following administrative expenses: professional actuarial costs, pension consultant fees, data processing, medical board examinations, salaries, benefits, audit/legal fees, equipment and supplies, postage, printing and miscellaneous expenses. These administrative expenses are funded from employer contributions.

*Net Position Accounts* - As provided by the Code, all assets of the System must be credited according to the purpose for which they are held to the annuity savings fund, the pension accumulation fund or the post-retirement increase fund.

These funds are classified together as the net position held in trust for pension benefits for financial reporting purposes and are explained below:

*Annuity Savings Fund Balance Account* - This Account records the accumulated contributions credited to individual members' accounts together with the interest thereon. Upon termination of employment, accumulated contributions plus interest are refunded from this fund. When a member retires, the member's accumulated contributions plus interest are transferred to the Pension Accumulation Fund Balance Account.

*Pension Accumulation Fund Balance Account* - This Account records all accumulated reserves used to pay member pensions, other benefits and administrative expenses. The reserves are accumulated from employer contributions, investment income, gains on sales of investments and amounts transferred from the Annuity Savings Fund Balance Account.

*Post-Retirement Increase Fund Balance Account* - This Account records all investment earnings in excess of valuation requirements transferred from the Pension Accumulation Fund Balance Account in order to finance post-retirement allowance increases to retired members.

At June 30, 2014 and 2013, the balances in the legally required accounts are as follows:

| | **FY 2014** (in Thousands) | **FY 2013** (in Thousands) |
|---|---|---|
| Annuity Savings Fund | $510,950 | $483,966 |
| Pension Accumulation Fund | 2,017,290 | 1,828,888 |
| Post-Retirement Increase Fund | 10,526 | 10,526 |
| Net Position Held in Trust for Pension Benefits | $2,538,766 | $2,323,380 |

### 3. Contributions

*Employee contributions:* System members contribute a percentage of their salary to the System determined by County Code. The contribution rates for members hired prior to July 1, 2007 are actuarially determined based on the member's age at enrollment and employee classification. Contribution rates for members hired on or after July 1, 2007 are fixed based on employee classification. A chart of member contribution rates is provided in the Summary of Plan Provisions in the Actuarial Section of this report.

## Notes to Financial Statements, continued

### 3. Contributions, continued

*Employer contributions:* The County and the participating employers intend to fund the System according to the actuarially determined employer contributions (ADEC). The ADEC is equal to the normal cost plus amortization of the unfunded actuarial accrued liability. The employer contributions to the System consist of the System's share of the normal cost plus an amount needed to accomplish 30-year amortization of the unfunded accrued liability, with each year's net change in the unfunded liability amortized over a separate, closed 30-year period. The employer contributions to the System are equal to 100% of the ADEC. Per Section 5-1-203 of the Code, contribution requirements of the plan members and the participating employers are established and may be amended by the Board. The FY 2014 Schedule of Employers' Contributions is shown below.

**Schedule of Employers' Contributions**
(in thousands)

| | FY 2014 | | |
|---|---|---|---|
| | **Plan A** | **Plan B** | **Total** |
| Actuarially Determined Contribution | $80,127 | $327 | $80,454 |
| Contributions in relation to the | | | |
| Actuarially Determined Contribution | 80,127 | 327 | 80,454 |
| Contribution deficiency (excess) | $ – | $ – | $ – |

The actuarial method and assumptions used in the calculations of the actuarially determined employer contributions (ADEC) are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the schedule above for FY 2014:

| | |
|---|---|
| Valuation Date: | June 30, 2012 |
| Actuarial cost Method: | Projected Unit Credit |
| Normal Cost Allocation: | Service |
| Amortization Method: | Level percent closed |
| Remaining Amortization Period: | 26 years |
| Asset Valuation Method(1) | 10- year smoothed market without corridor |
| Actuarial Assumptions: | |
| -Investment Rate of Return(2) | 7.25% |
| -Projected Salary Increases(3) | 3.00% - 7.50% |
| -Cost-of-Living Adjustments(4) | None |
| -Mortality Rates | Based on the 1995 George B. Buck Mortality Table +1 |

(1) The smoothing period was changed from 5 to 10 years for the June 30, 2010 valuation.

(2) The investment rate of return was decreased from 7.875% to 7.250% for the June 30, 2012 Valuation. Includes inflation at 3%.
(3) Includes inflation at 3%.
(4) Increases equal to the CPI up to a maximum of 4% (or 3% after 2009 valuation) are granted only if sufficient reserves have accumulated in the Post Retirement Increase Fund.

## Notes to Financial Statements, continued

**4. Cash Deposits, Investments and Securities Lending**

*Custodial Credit Risk* – For Cash Deposits, Investments and Securities Lending, custodial credit risk is the risk that, in the event of the failure of the bank or counterparty, the System will not be able to recover the deposits, value of its investments or collateral securities that are in possession of an outside party. The System cash deposits are fully covered by FDIC insurance and/or collateral pledged to the System's account held by the System's agent in the System's name at year-end. The collateral pledged and held consists of obligations issued by the U.S. government and agencies. Investment securities are registered in the name of the System. As of June 30, 2014, and 2013 the carrying amount of cash was $0.3 million and $1.3 million, respectively.

*Investment Policy* – Pursuant to Section 5-1-247 of the Baltimore County Code, the Board of Trustees utilizes the "prudent person" standard for managing the assets of the System. The Board has established the following policies:

1) Assure that the System's investment policy has been designed to provide broad diversification among asset classes in order to maximize return at an appropriate level of risk and minimize the risk of large losses to the System.

2) Employ a diversity of investment managers with different investment styles on how to obtain their investment objective.

3) Closely monitor the performance of all investment managers not only in relation to specific objectives, but also in relation to other fund managers following the same investment objectives.

The System is currently invested in stocks (domestic and foreign), fixed income securities, private equity funds, real estate funds, hedge fund of funds, global asset allocation funds, and real assets. The Code provides for full power to hold, purchase, sell, assign, transfer and dispose of any of the securities and investments in any of the System's funds.

For the year ended June 30, 2014, the System has operated in all material respects in accordance with the System's investment policy.

The System's investment policy as of June 30, 2014, is shown below for the broad investment categories:

| ***Asset Class*** | ***Allocation Target*** | ***Allocation Range*** |
|---|---|---|
| *U. S. Equities* | *22%* | *16 - 28%* |
| *International Equities* | *16%* | *12 - 22%* |
| *Private Equities* | *5%* | *0 - 7%* |
| *Fixed Income* | *27%* | *19 - 35%* |
| *Hedge FOF* | *5%* | *0 - 7%* |
| *Real Estate* | *5%* | *0 - 7%* |
| *Global Asset Allocation* | *15%* | *10 - 20%* |
| *Real Asset* | *5%* | *0 - 7%* |
| ***Total*** | ***100%*** | |

*Rate of Return* – For the year ended June 30, 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 13.6%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

## Notes to Financial Statements, continued

*Interest Rate Risk* – The Employees' Retirement System of Baltimore County policy guidelines do not specifically address limits on maturities as a means of managing its exposure to fair value losses arising from changing interest rates. The manager of each fixed income portfolio is responsible for determining the average maturity of their portfolio. The following is a maturity schedule of the System's fixed income investments of bonds and short term investments as of June 30, 2014 and 2013.

### Investment Maturities (in Years)
### FY 2014
*(Expressed in Thousands)*

| Investment Type | Fair Value | Less than 1 | 1 - 4.9 | 5 - 9.9 | 10-19.9 | 20-30 | More Than 30 |
|---|---|---|---|---|---|---|---|
| U.S. Govt. Obligations | $ 86,362 | $ 24,420 | $ 13,036 | $ 9,981 | $ 11,711 | $ 15,591 | $ 11,623 |
| U.S. Agency Securities | 63,415 | 961 | 9,737 | 11,964 | 15,112 | 25,582 | 59 |
| Municipals | 5,220 | - | - | 1,685 | - | 3,535 | - |
| Corporate Debt | 115,360 | 26,885 | 25,640 | 28,076 | 9,752 | 14,440 | 10,567 |
| Bond Mutual Funds | 373,351 | - | 43,492 | 329,859 | - | - | - |
| Foreign Debt | 18,341 | 3,989 | 4,330 | 5,579 | 1,738 | 1,356 | 1,349 |
| Total | $ 662,049 | $ 56,255 | $ 96,235 | $ 387,144 | $ 38,313 | $ 60,504 | $ 23,598 |

### Investment Maturities (in Years)
### FY 2013
*(Expressed in Thousands)*

| Investment Type | Fair Value | Less than 1 | 1 - 4.9 | 5 - 9.9 | 10-19.9 | 20-30 | More Than 30 |
|---|---|---|---|---|---|---|---|
| U.S. Govt. Obligations | $ 80,853 | $ 2,664 | $ 7,975 | $ 21,827 | $ 15,149 | $ 24,314 | $ 8,924 |
| U.S. Agency Securities | 76,490 | 4,422 | 6,848 | 9,208 | 15,562 | 21,429 | 19,021 |
| Municipals | 16,336 | 896 | 11,449 | - | - | 3,991 | - |
| Corporate Debt | 125,849 | 27,012 | 36,808 | 28,338 | 11,735 | 11,573 | 10,383 |
| Bond Mutual Funds | 304,461 | - | - | 304,461 | - | - | - |
| Foreign Debt | 14,473 | 2,713 | 6,460 | 3,866 | - | 817 | 617 |
| Total | $ 618,462 | $ 37,707 | $ 69,540 | $ 367,700 | $ 42,446 | $ 62,124 | $ 38,945 |

*Credit Risk* - The System's investment policy is to apply the prudent-person rule: Investments are made as a prudent person would be expected to act with discretion and intelligence, to seek reasonable income, preserve capital and in general, avoid speculative investments. Investments in high yield securities are limited to 20% in the guidelines for core plus fixed income managers, Western Asset Management and Reams Asset Management. PIMCO Diversified Fixed Income Fund target 1/3 of their portfolio in high yield securities. Loomis Sayles Credit Asset Fund may invest up to 25% of their portfolio in high yield securities. Loomis Sayles Strategic Asset Trust may invest up to 50% long or short. Seix may invest between 20% and 60% of their portfolio in high yield securities. Stone Harbor may invest up to 100% of their portfolio in high yield securities.

## Notes to Financial Statements, continued

As of June 30, 2014 and 2013 the System's fixed income investments had the following credit risk characteristics:

| | FY 2014 | | | FY 2013 | |
|---|---|---|---|---|---|
| Moody's Ratings or Comparable | Fair Value (in Thousands) | Percent of Fixed Income Investments | | Fair Value (in Thousands) | Percent of Fixed Income Investments |
| **AAA** | $ 162,760 | 24.6% | | $ 144,165 | 23.31% |
| **AA** | 12,023 | 1.8 | | 13,475 | 2.18 |
| **A** | 28,024 | 4.2 | | 39,956 | 6.46 |
| **BBB** | 47,052 | 7.1 | | 45,860 | 7.42 |
| **BB** | 2,880 | 0.4 | | 3,535 | 0.57 |
| **B** | 2,897 | 0.5 | | 2,863 | 0.46 |
| **CCC** | 5,120 | 0.8 | | 2,655 | 0.43 |
| **CC** | 1,898 | 0.3 | | 986 | 0.16 |
| **NR*** | 399,395 | 60.3 | | 364,967 | 59.01 |
| **Total** | $662,049 | 100.0% | | $618,462 | 100.00% |

*NR represents securities not rated, primarily made up of swaps and commingled funds, which by their nature do not have credit quality ratings.

*Investments in Excess of 5% of the Net Position Held in Trust for Pension Benefits*
The System had no individual investments at fair value in excess of 5% of the System's net position held in trust for pension benefits as of June 30, 2014 and 2013.

*Investment Commitments*

As of June 30, 2014 and 2013, the System had outstanding private equity commitments of $94.6 and $67.5 million, respectively.

*Foreign Currency Risk*
The System's exposure to foreign currency risk is derived from its positions in foreign currency-denominated common stock and fixed income investments. The Systems exposure to foreign currency risk as of June 30, 2014 and 2013 is as follows:

| Currency | FY 2014 Fair Value (in Thousands) | | FY 2013 Fair Value (in Thousands) |
|---|---|---|---|
| Australian Dollar | $ 6,401 | | $ 5,424 |
| Canadian Dollar | - | | 37 |
| Danish Krone | 698 | | 143 |
| Euro Currency Unit | 63,857 | | 54,310 |
| Hong Kong Dollar | 6,974 | | 5,570 |
| Israeli Shekel | 1,197 | | 930 |
| Japanese Yen | 43,152 | | 35,085 |
| Norwegian Krone | 1,882 | | 1,030 |
| Pound Sterling | 20,403 | | 16,550 |
| Singapore Dollar | 1,637 | | 1,093 |
| South Korean Won | 5,304 | | 5,286 |
| Swedish Krona | 5,943 | | 5,340 |
| Swiss Franc | 12,410 | | 10,427 |
| Total | $169,858 | | $141,225 |

## Notes to Financial Statements, continued

*Derivatives*

Future contracts are standardized, exchange-traded contracts to purchase or sell a specific financial instrument at a predetermined price. Futures are used primarily as a tool to increase or decrease market exposure to various asset classes. Gains and losses on futures contracts are settled daily based on a notional (underlying) principal value and do not involve an actual transfer of the specific instrument. Because of daily settlement, the futures contracts have no fair value. The System entered into certain futures contracts of which the notional value at June 30, 2014 and 2013 were $(44,966,696) and$(16,263,919), respectively.

The System utilizes certain derivative instruments for the purpose of obtaining income or profit. The derivatives are subject to credit risks, interest rate risk, and foreign currency risk. The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2014, classified by type and the changes in fair value of such derivative instruments for the year then ended are as follows:

| | Changes in Fair Value (in Thousands) | | | Fair Value as of June 30, 2014 (in Thousands) | |
|---|---|---|---|---|---|
| **Investment Derivatives:** | **Classification** | **Amount** | | **Amount** | **Notional Value** |
| Futures | Investment Revenue | - | | - | ($ 44,967) |
| Options | Investment Revenue | $ (5) | | $ 3 | 642 |
| Swaps | Investment Revenue | (16) | | 175 | 6,411 |
| Mortgage Derivatives | Investment Revenue | (43) | | 2,118 | 2,118 |
| TBA Transactions | Investment Revenue | 71 | | 11,268 | 11,268 |

| | Changes in Fair Value (in Thousands) | | | Fair Value as of June 30, 2013 (in Thousands) | |
|---|---|---|---|---|---|
| **Investment Derivatives:** | **Classification** | **Amount** | | **Amount** | **Notional Value** |
| Futures | Investment Revenue | - | | - | ($ 16,264) |
| Options | Investment Revenue | $ (30) | | $ (34) | 428 |
| Swaps | Investment Revenue | 0 | | 85 | 376 |
| Mortgage Derivatives | Investment Revenue | (95) | | 3,143 | 3,143 |
| TBA Transactions | Investment Revenue | (194) | | 16,261 | 16,261 |

*Rationale for Derivative strategies:*

The purpose of using futures and options is to hedge the portfolio to reduce risk and adjust exposure along the yield curve. A short position in total options reduces the portfolio's convexity in exchange for higher yield. A long position increases convexity in exchange for lower yields.

The effect of long and short treasury notes and bond futures is to shift the portfolio's duration to its target position.

The combined effect of Eurodollar and Euribor futures and options is to adjust exposure to the front portion of the yield curve.

Long and short call and put options on notes and bond futures are used to adjust portfolio convexity in exchange for higher yields.

Credit default indices and credit default swaps on individual names are used as an efficient, low cost way of adjusting credit exposure on the margin.

## Notes to Financial Statements, continued

***Securities Lending Transactions*** - The Board's policies permit the System to lend its securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The System's custodian lends U.S. government and agency securities, corporate bonds and stocks for collateral in the form of cash, other securities and irrevocable bank letters of credit. Collateral securities, letters of credit and cash are initially pledged at 102% of the market value of the securities lent. Additional collateral is to be provided by the next business day if the collateral value falls to less than 100% of the market value of the securities lent. The System did not impose any restrictions during the fiscal year on security loans the custodian made on its behalf. At June 30, 2014, the System had no credit risk exposure to borrowers because the amounts the System owes the borrowers exceed the amounts the borrowers owe the System. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of the security loans made by other entities that use the agent's pool, which the System cannot determine. The System cannot pledge or sell collateral securities received unless the borrower defaults. All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in both a separately managed fixed income account and a cash collateral pool, which at year-end had a weighted-average maturity of 5 days. The collateral held as of June 30, 2014 and 2013 were $63.4 million and $51.4 million, respectively. The fair value of securities on loan as of June 30, 2014 and 2013 totaled $54.3 million and $49.7 million, respectively. At June 30, 2014 the cash collateral pool had an unrealized loss of approximately $0.2 million which is recorded in the Statement of Changes in Fiduciary Net Position as a decrease in the fair value of investments.

The following tables present the fair value of the underlying securities, and the value of the collateral pledged at June 30, 2014 and 2013 (in thousands):

| **FY 2014** Securities Lent for: | Fair Value of Loaned Securities | Collateral Fair Value | Percent Collateralized |
|---|---|---|---|
| Cash Collateral | $26,785 | $27,365 | 102.17% |
| Non-Cash Collateral | 27,510 | 36,062 | 131.09% |
| Total | $54,295 | $63,427 | 116.82% |

| **FY 2013** Securities Lent for: | Fair Value of Loaned Securities | Collateral Fair Value | Percent Collateralized |
|---|---|---|---|
| Cash Collateral | $28,939 | $30,004 | 103.68% |
| Non-Cash Collateral | 20,811 | 21,417 | 102.91% |
| Total | $49,750 | $51,421 | 103.36% |

### 5. Risk Management

The County bears any risk of loss related to the System (e.g. torts, theft of, damage to, or destruction of assets; errors or omissions, job-related illnesses, or injuries to employees; and natural disasters). The County manages its risks internally and sets aside assets for claims settlement in an internal service fund.

### 6. Litigation

The U.S. Equal Employment Opportunity Commission (EEOC) has sued Baltimore County and six (6) County Unions claiming that they violated the Age Discrimination in Employment Act (ADEA) by requiring employees who join the retirement system as older workers to contribute more than workers who joined as a younger age. The

## Notes to Financial Statements, continued

United States District Court for the District of Maryland granted Baltimore County's Motion for Summary Judgment on January 21, 2009. The Fourth Circuit Court of Appeals reversed and remanded the case to the District Court. By Order entered on October 17, 2012, the District Court reversed itself and found the County liable for age discrimination. After the District Court granted the County permission to file an interlocutory appeal, the Fourth Circuit affirmed the liability determination of the District Court on March 31, 2014. The Supreme Court denied the County's Petition for Writ of Certiorari on November 3, 2014 and the case will be remanded to the District Court for a determination of damages. The County has called upon its long-term actuary, Buck Consultants, to defend, indemnify and hold the County harmless in this action. EEOC's claim for "excess contributions" by older workers was estimated to be $17 million to $19 million. The Employees' Retirement System of Baltimore County would absorb any potential liability through higher member contributions.

**7. Deferred Retirement Option Program (DROP)**

Effective July 1, 2007, General employees hired prior to July 1, 2007, are offered a Forward DROP. The DROP allows eligible general employees to elect to receive a lump sum payment at retirement in exchange for a reduced monthly benefit. The DROP period is a minimum of 5 years and a maximum of 10 years. Eligibility is age 55 plus a total of age and service of at least 85. The DROP account will include benefit payments at the maximum option, employee contributions, an interest credit of 5%, plus any cost of living increase granted to retirees, provided the member has been in the DROP for at least 12 months. As of June 30, 2014, the balance of the System's DROP for General employees was $32.9 million. As of June 30, 2014, DROP payables were $5.2 million.

**8. Net pension Liability of the System**

The components of the net pension liability as of June 30, 2014, were:

| Components of Net Pension Liability | Plan A | Plan B | Total |
|---|---|---|---|
| Total pension liability | $3,671,672,371 | $51,046,669 | $3,722,719,040 |
| The Plan's fiduciary net position | (2,504,180,104) | (34,586,142) | (2,538,766,246) |
| The Plan's net pension liability | $1,167,492,267 | $16,460,527 | $1,183,952,794 |
| The Plan's net position as a percentage of the total pension liability | 68.20% | 67.75% | 68.20% |

**Actuarial Assumptions**

The total pension liability was determined by an actuarial valuation as of June 30, 2013 and rolled forward to June 30, 2014 using the actuarial assumptions set forth below. These assumptions were applied to all periods included in the measurement. For FASB 67 purposes, the Post Retirement Increase Fund (PRIF) assets equal to $10,526,113 were excluded from retiree and beneficiary liabilities but included in the Plan's fiduciary net position. (Detailed actuarial assumptions are set forth in the Actuarial Section of this report).

The last experience study covered the period July 1, 2006 through June 30, 2011. The experience investigation was prepared in accordance with Article 5-1-245 of the Baltimore County Code, which requires that the actuary periodically undertake an experience investigation into the mortality, service, and compensation experience of the members and retirees of the System and that these investigations take place at least every five years.

**Interest Rate:** 7.00% per annum, compounded annually.
The valuation interest rate was changed from 7.25% to 7.00% as of June 30, 2013.

**Inflation:** 3.0% per annum.

## Notes to Financial Statements, continued

**Actuarial Assumptions, continued**

**Salary Increase:** Sample rates are as follows:

| | Annual Rates of Salary Increase | | |
|---|---|---|---|
| | Fiscal Year 2014 – Fiscal Year 2016 | | Fiscal Year 2017 and thereafter |
| Age | General Employees, Correctional Officers and Deputy Sheriffs | Police Officers and Firefighters | All Members |
| 25 | 6.40% | 6.55% | 6.55% |
| 30 | 4.90 | 5.05 | 5.05 |
| 35 | 3.90 | 4.05 | 4.05 |
| 40 | 3.40 | 3.55 | 3.55 |
| 45 | 2.90 | 3.05 | 3.05 |
| 50 | 2.40 | 2.55 | 3.00 |
| 55 | 1.90 | 2.30 | 3.00 |
| 60 | 1.90 | 2.30 | 3.00 |
| 65 | 1.90 | 2.30 | 3.00 |

The effect of these assumptions is illustrated by the following examples: When used in the valuation process, the age-based rates shown above produce an effective annual average increase of 4.1% over a 27-year career for a Policeman or Fireman hired at age 25, and 3.5% over a 30-year career for a General Employee hired at age 30.

**Marital Status:** For Firefighters and Police, 90% of active members are assumed to be married. For all other employees, 90% of active males and 50% of active females are assumed to be married. In all cases, it is assumed that the male spouse is 3 years older than the female spouse.

**Credit for Unused Sick Leave:** For members entitled to receive credit for unused sick leave, it was assumed that each member will accumulate such credit as follows:

| | |
|---|---|
| Supervisory, management and confidential (SMC) members, other than firefighters | ¾ year |
| Firefighters including SMC members | 1 year |
| Employees other than Police and Firefighters, excluding SMC members | ½ year |
| Police | ½year |

**Long-term expected rate of return.** The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2014 are summarized in the table below:

## Notes to Financial Statements, continued

**Schedule of Long-term expected rate of return.**

| Asset Class | Long-Term Expected Rate of Return |
|---|---|
| Cash | 0.00% |
| Large Cap Equities | 4.50 |
| Small/Mid Cap Equities | 4.75 |
| International Equities (Unhedged) | 5.00 |
| Emerging International Equities | 6.25 |
| Core Bonds | 1.21 |
| High-Yield Bonds | 2.75 |
| EMD (Local Currency) | 4.00 |
| Diversified Fixed Income | 2.59 |
| Private Equity | 6.50 |
| Real Estate (Core) | 3.25 |
| Hedge Funds | 3.75 |
| Global Asset Allocation | 4.07 |
| Risk Parity | 3.14 |
| Commodities | 2.75 |

**Discount rate.** The discount rate used to measure the total pension liability was the funding valuation interest rate of 7.00%. The projection of cash flow used to determine the discount rate assumed that employer contributions will continue to follow the current funding policy. Based on those assumptions, the System's fiduciary net position was projected to make all future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability, in accordance with the method prescribed by GASB Statement No. 67. We believe this assumption is reasonable for the purposes of the measurements required by the Statement. In the event of benefit payments not covered by the System's fiduciary net position, a municipal bond rate of 3.66% would be used to discount the be benefit payments not covered by the System's fiduciary net position. The 3.66% rate equals the S&P Municipal Bond 20-Year High Grade Rate index at June 30, 2014.

**Sensitivity of the net pension liability to changes in the discount rate.** The following schedules presents the net pension liability, calculated using the discount rate of 7.00%, as well as what the System's net liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.00%) or 1 percentage point higher (8.00%) than the current rate (in thousands):

| Net Pension Liability | 1.00% Decrease (6.00%) | Current Discount Rate (7.00%) | 1.00% Increase (8.00%) |
|---|---|---|---|
| **Plan A** - Net Pension Liability | $1,577,537 | $1,167,492 | $819,960 |
| **Plan B** - Net Pension Liability | $27,457 | $16,461 | $7,849 |

## Required Supplementary Information
## (Unaudited)

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

| | FY 2014* | | |
|---|---|---|---|
| | Plan A | Plan B | The System |
| **Total Pension Liability** | | | |
| Service Cost | $ 51,438 | $ 9,150 | $ 60,588 |
| Interest | 247,768 | 3,386 | 251,154 |
| Changes of benefit terms | - | - | - |
| Differences between expected and actual experience | - | - | - |
| Changes of assumptions | - | - | - |
| Benefit payments, including refunds of member contributions | (227,438) | (1,396) | (228,834) |
| **Net change in total pension liability** | 71,768 | 11,140 | 82,908 |
| | | | - |
| **Beginning total pension liability** | 3,599,904 | 39,907 | 3,639,811 |
| **Ending total pension liability: (a)** | 3,671,672 | 51,047 | 3,722,719 |
| | | | - |
| **Plan fiduciary net position** | | | - |
| Employer contributions | 80,127 | 327 | 80,454 |
| Employee contributions | 29,860 | 7,984 | 37,844 |
| Net investment income | 323,620 | 3,644 | 327,264 |
| Benefit payments, including refunds of member contributions | (227,438) | (1,396) | (228,834) |
| Administrative expense | (1,326) | (16) | (1,342) |
| Other | - | - | - |
| **Net change in plan fiduciary net position** | 204,843 | 10,543 | 215,386 |
| | | | - |
| **Beginning Plan fiduciary net position** | 2,299,337 | 24,043 | 2,323,380 |
| **Ending Plan fiduciary net position: (b)** | 2,504,180 | 34,586 | 2,538,766 |
| **Plan's net pension liability - ending (a) - (b)** | $ 1,167,492 | $ 16,461 | $ 1,183,953 |
| | | | - |
| **Plan fiduciary net position as a percentage** | | | - |
| **of the total pension liability** | 68.20% | 67.75% | 68.20% |
| **Covered-employee payroll** | $ 403,401 | $ 106,498 | $ 509,899 |
| **System's net pension liability as a percentage of covered-employee payroll** | 289.41% | 15.46% | 232.19% |

*Ten-year historical trend information is not available but will be compiled going forward.

## Required Supplementary Information
## (Unaudited)

### Schedule of Investment Returns

| Schedule of Investment Returns | Fiscal Year* | Rate |
|---|---|---|
| Annual money-weighted rate of return, net of investment expenses | 2014 | 13.6% |

*Ten year information is not available at this time, but will be compiled going forward.

### Schedule of Employers' Contributions
### Last 10 Fiscal Years
(in thousands)

| | FY 2014 | FY 2013 | FY 2012 | FY 2011 | FY 2010 | FY 2009 | FY 2008 | FY 2007 | FY 2006 | FY 2005 |
|---|---|---|---|---|---|---|---|---|---|---|
| Actuarially Determined Contribution | $80,454 | $73,362 | $65,127 | $58,340 | $57,976 | $49,763 | $44,168 | $40,065 | $34,433 | $29,968 |
| Contributions in relation to the Actuarially Determined Contribution | 80,454 | 73,362 | 65,127 | 58,340 | 57,976 | 49,763 | 44,168 | 40,065 | 34,433 | 29,968 |
| Contribution deficiency (excess) | $ – | $ – | $ – | $ – | $ – | $ – | $ – | $ – | $ – | $ – |
| Covered-employee payroll | $519,662 | $532,406 | $544,230 | $536,394 | $529,269 | $495,387 | $454,227 | $429,250 | $406,743 | $378,580 |
| Contributions as a percentage of covered-employee payroll | 15.48% | 13.78% | 11.97% | 10.88% | 10.95% | 10.05% | 9.72% | 9.33% | 8.47% | 7.92% |

The County intents to fund the Plan based on 100% of the Actuarially Determined Employer Contribution (ADEC).

## Notes to the Required Supplementary Information
## (Unaudited)

The actuarial method and assumptions used in the calculations of the actuarially determined employer contributions (ADEC) are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the schedule of employer contributions above for FY 2014:

| | |
|---|---|
| Valuation Date: | June 30, 2012 |
| Actuarial cost Method: | Projected Unit Credit |
| Normal Cost Allocation: | Service |
| Amortization Method: | Level percent closed |
| Remaining Amortization Period: | 26 years |
| Asset Valuation Method(1) | 10- year smoothed market without corridor |
| Actuarial Assumptions: | |
| -Investment Rate of Return(2) | 7.25% |
| -Projected Salary Increases(3) | 3.00% - 7.50% |
| -Cost-of-Living Adjustments(4) | None |
| -Mortality Rates | Based on the 1995 George B. Buck Mortality Table +1 |

(1) The smoothing period was changed from 5 to 10 years for the June 30, 2010 valuation.

(2) The investment rate of return was decreased from 7.875% to 7.250% for the June 30, 2012 Valuation. Includes inflation at 3%.
(3) Includes inflation at 3%.
(4) Increases equal to the CPI up to a maximum of 4% (or 3% after 2009 valuation) are granted only if sufficient reserves have accumulated in the Post Retirement Increase Fund.

*Contributions:*
On April 21, 2014, the County Council passed Bill No. 25-14 which increased the rate of regular contribution for sworn members of the Police Department on pay schedule IV, hired on or after July 1, 2014 from 8% to 10% of earnable compensation, effective July 1, 2014.

## Required Supplementary Information
## (Unaudited)

## Supplementary Supporting Schedules

### Investment Fees and Expenses
(in Thousands)
For the Years Ended June 30, 2014 and 2013

| | FY 2014 | FY 2013 |
|---|---|---|
| Investment Managers: | | |
| Domestic Equity managers | $ 3,839 | $ 3,149 |
| International Equity managers | 2,167 | 1,996 |
| Fixed Income managers | 4,913 | 2,647 |
| Private Equity managers | 1,896 | 1,939 |
| Real Estate managers | 1,153 | 1,088 |
| Hedge Fund managers | 719 | 905 |
| Global Asset Allocation managers | 2,838 | 2,524 |
| Real Asset managers | 658 | 524 |
| Total manager fees | 18,183 | 14,772 |
| Investment Service Fees: | | |
| Custodian fees | 220 | 303 |
| Consultant fees | 297 | 288 |
| Total service fees | 517 | 591 |
| Subtotal - Investment Expenses | 18,700 | 15,363 |
| Security Lending Fees: | | |
| Agent fees | 90 | 142 |
| Borrower rebates | (246) | (381) |
| Total Security Lending fees | (156) | (239) |
| **Total Investment Fees and Expenses** | $ 18,544 | $ 15,124 |

### Schedule of Administrative Expenses
(in Thousands)
For the Years Ended June 30, 2014 and 2013

| | FY 2014 | FY 2013 |
|---|---|---|
| Personal Services: | | |
| Salaries | $ 582 | $ 539 |
| Employee Fringe benefits | 193 | 178 |
| Total Personal Services | 775 | 717 |
| Professional Services: | | |
| Actuarial | 287 | 407 |
| Legal and Financial | 66 | 12 |
| Data Processing | 112 | 1,021 |
| Medical | 26 | 39 |
| Audit | 19 | 41 |
| Total Professional Services | 510 | 1,520 |
| Communication: | | |
| Printing | 16 | 10 |
| Telephone | 1 | 2 |
| Postage | 32 | 41 |
| Total Communication | 49 | 53 |
| Miscellaneous: | | |
| Equipment and Supplies | 8 | 4 |
| **Total administrative expenses** | $ 1,342 | $ 2,294 |

# INVESTMENT SECTION

## INVESTMENT CONSULTANT'S REPORT

**Introduction**

This report, prepared for the Employees Retirement System of Baltimore County (the "System") by NEPC, LLC, is based on accounting information supplied by the System's custodian, Mellon Bank. NEPC relies on this source for security pricing, calculation of accruals, and all transactions. NEPC reconciles the monthly rates of return provided by Mellon Trust with those calculated by each investment manager. NEPC exercises reasonable professional care in preparing the performance report, and the performance calculations are reported to the greatest degree possible in compliance with the presentation standards of the Global Performance Investment Standards (GIPS) promulgated by the CFA Institute. The returns, calculated using a time-weighted rate of return methodology based upon market values, are reported on both net of fees and gross of fees to provide comparisons with the appropriate benchmarks.

**Distinction of Responsibilities**

The Board of Trustees (the "Trustees") of the System is responsible for establishing the investment goals and objectives for the System's Retirement Fund (the "Fund") and sets the appropriate risk levels and asset allocation policy. The criteria used in developing the System's investment policy include: actuarial information, such as funded status, the actuarial return assumption and benefits obligations; risk and return expectations of the capital markets; the financial conditions of the County; and practices of similar types of funds. The investment policy has been developed after the Trustees have given careful consideration of the potential financial implication of a wide range of investment policies. The policy describes the degree of pension fund risk that the Trustees, as System fiduciaries, deem appropriate.

In carrying out their duties the Trustees follow acceptable standards of prudence. These standards include: 1) acting for the exclusive benefit of the Fund participants and beneficiaries; 2) exercising skill, care and diligence of a prudent person acting in a similar capacity; and 3) diversifying investments to minimize the risk of large losses.

The investment managers required to execute the policy will invest System assets in accordance with the established policy and with their judgments concerning relative investment values. In particular, the investment managers are accorded full discretion to select individual securities, make periodic strategic adjustments and diversify their portfolios.

**Investment Policy/Structure**

The System's investment policy was designed to provide broad diversification among asset classes in order to maximize return at an appropriate level of risk and minimize the risk of large losses to the System. In addition, asset allocation ranges have also been implemented to maintain compliance with the investment policy and ensure the System will achieve its long-term risk and return objectives.

The System's investment policy is shown below for the broad investment categories:

**Investment Policy as of 6/30/2014**

| *Asset Class* | *Allocation Target* | *Allocation Range* |
|---|---|---|
| *U. S. Equities* | *22%* | *16 - 28%* |
| *International Equities* | *16%* | *12 - 22%* |
| *Private Equities* | *5%* | *0 - 7%* |
| *Fixed Income* | *27%* | *19 - 35%* |
| *Hedge FOF* | *5%* | *0 - 7%* |
| *Real Estate* | *5%* | *0 - 7%* |
| *Global Asset Allocation* | *15%* | *10 - 20%* |
| *Real Asset* | *5%* | *0 - 7%* |
| ***Total*** | ***100%*** | |

## INVESTMENT CONSULTANT'S REPORT, continued

Within each asset class, the Trustees have employed several investment managers to further diversify the investment approach and minimize style bias. The Trustees have employed both active and passive investment strategies in order to obtain the desired asset allocation mix in the most cost effective and efficient manner.

**Investment Objective**

The System's long-term investment objective is to achieve a total rate of return which exceeds the Policy Index, defined here as the actual asset allocation for each asset class invested in its respective index. The Trustees recognize that there will be short-term deviations from these long-term investment objectives, and therefore, have developed performance expectations for the Fund and individual investment managers.

The overall Fund is also compared to the InvestorForce (IF) Public Funds Universe, a large and representative universe of actual institutional performance results in the industry. At June 30, 2014, this universe contained actual public fund data for 66 public plans with an aggregate market value of $858.8 billion.

**Market Overview**

Fiscal year 2014 continued to build on the solid foundation of gains experienced by investors in fiscal year 2013. Economic and political uncertainties were generally shrugged off by the markets in fairly short order. Continued talk of the Fed's desire to reduce their bond purchases and concerns about the accommodative monetary policy were week-long events rather than quarter-long events. Janet Yellen's appointment as the new Federal Reserve Chairman was highly anticipated and positively viewed by the markets. U.S. consumer confidence surged early in the fiscal year as unemployment levels improved. A harsh winter in the U.S. led to a short-lived setback that was overcome relatively quickly by strong GDP growth in the second half of the fiscal year. The Fed began its anticipated tapering program in the second half of fiscal year 2014, which was viewed as a non-event as U.S. equity markets posted gains in each of the four quarters. Early in calendar year 2014, rising yields, over a potential Fed initiated short-term rate increase, were quickly bid back down over concerns about debt in the "fragile five" emerging market countries. International markets, including emerging markets, experienced their own periods of volatility throughout the preceding twelve month period.

As a result of this economic background, investment returns were very strong. The broad US equity market, as measured by the Wilshire 5000 Index, posted a return of 25.1% during fiscal year 2014. Developed international equity markets, measured by the MSCI EAFE Index (net), also rose sharply, generating a 23.6% return during the fiscal year. Smaller or emerging markets, represented by the MSCI Emerging Markets Index (net), rebounded nicely from a disappointing return in fiscal year 2013, to post a 14.3% return. The domestic bond market, as measured by the Barclays Aggregate Bond Index, also managed to post a respectable 4.4% return. Global bonds, as measured by the Citigroup World Government Bond Index, also finished the year strong, providing investors with 6.9% return on an unhedged basis, while hedged investors enjoyed a slightly smaller return as the U.S. dollar appreciated throughout fiscal year 2014.

**Investment Performance**

For the fiscal year ended June 30, 2014, the System's investment portfolio gained 14.8%, including dividends and interest income, unrealized gains and losses.

The System's domestic equity portfolio posted a 25.9% return over the fiscal year as compared to a 25.1% return of the broad U.S. equity market, as measured by the Wilshire 5000 Index. The System's active U.S. equity managers performed well during the year, collectively exceeding the broad market benchmark by 0.8%. The System's non-US equity portfolio's net of fee return of 17.8% fell short of the 21.8% return of the international equity benchmark. The return from the developed international market portfolio fell short of the benchmark's return by 0.4%, while the emerging market component trailed its benchmark by 4.0%. The System's fixed income portfolio returned 7.2% over the fiscal year and exceeded the broad domestic bond market by 2.0%. The System's core bond managers, collectively, and its emerging market debt manager exceeded the returns of their respective benchmarks during the fiscal year.

## INVESTMENT CONSULTANT'S REPORT, continued

To gauge how the overall fund did relative to other public funds, the System's gross of fee return for the fiscal year was compared to the median public fund in the IF Universe of Public Funds with assets exceeding $1 billion. The System's gross of fee return of 14.8% ranked below median (76$^{th}$ percentile) of the Universe for the fiscal year. The market value of the System's combined increased from $2.33 billion on June 30, 2013 to $2.93 billion on June 30, 2014.

The returns for various asset classes earned during the fiscal year ending June 30, 2014 are shown in the following table.

| | | | Fiscal Year Rate of Return | |
|---|---|---|---|---|
| **Investment Type** | **Market Value (in Millions)** | **Percent of Total** | **System** | **Benchmark** |
| U S Equities | $ 609.1 | 23.9% | 25.9% | 25.1% |
| International Equities | 427.1 | 16.8 | 17.8% | 21.8% |
| Private Equity | 114.1 | 4.5 | 9.5% | 9.5% |
| Hedge Funds | 117.3 | 4.6 | 7.7% | 7.6% |
| Real Estate | 104.7 | 4.1 | 12.7% | 11.2% |
| Fixed Income | 665.1 | 26.1 | 7.2% | 5.2% |
| GAA | 380.2 | 14.9 | 15.5% | 12.0% |
| Real Assets | 123.7 | 4.9 | 7.8% | 8.2% |
| Cash | 5.8 | 0.2 | 0.1% | 0.0% |
| Total Fund* | $2,547.1 | 100.0% | 14.8% | 9.4% |

*The Total Fund shown above in the amount of $2,547.1 includes short-term investments of $32.1, accrued interest and dividends receivable of $2.3, receivables for investment sold of $38.9 and payables for investment purchased of $47.2. These items are separately reported from "Total Investments" in the Statement of Fiduciary Net Position.

### Investment Strategies

During the fiscal year, the Trustees conducted an annual asset allocation review. The review confirmed that the existing investment allocation remained appropriate and no changes were made to the target allocations. Two new private equity commitments were made by the Board during the fiscal year.

John Krimmel, CPA, CFA
Partner

## Outline of Investment Policies

**Investment Policy.** As provided in Article 5 Title 1 of the Baltimore County Code, the Board of Trustees of the Employees' Retirement System of Baltimore County (the "Board") is empowered to invest the System's assets and to take appropriate action regarding the investment, management and custodianship of plan assets. The investment responsibilities include establishing reasonable investment objectives, developing investment policy guidelines, selecting investment managers and evaluating performance results to assure adherence to guidelines and the achievement of objectives.

The Board has carefully exercised these responsibilities by diversifying the assets into common stocks (domestic and foreign), fixed income, real estate, hedge funds, private equity, and real assets. The investment policy targets are 22% in U.S. equities, 16% in international equities, 27% in fixed income investments, 5% in real estate, 5% in hedge funds, 5% in private equity, 15% in global asset allocation strategies and 5% in real assets. The investment policy authorizes the allocation targets to be maintained within the allocation ranges specified in the Investment Consultant's report.

A pension investment consultant has been appointed to advise and consult with the Board and the System staff, prepare recommendations on investment policies, investment management structure and asset allocation, and to monitor and evaluate the performance of the investment managers and the asset custodian.

The Board authorizes the managers to vote all proxies related to stocks in which they invest pension assets. The Board expects the managers to cast votes solely in the best interest of plan beneficiaries. Managers are required to report annually to the Board on its proxy-voting policies and activities on the System's behalf.

### Investment Results

The following schedule compares rates of return, gross of fees, for the System portfolio with a comparative index, market indices and the inflation rate.

The market indices shown below are the Wilshire 5000 Stock Index, Morgan Stanley Capital International All Country World Ex-U.S. Index, the Barclays Capital Universal Index, 60% MSCI World/40% WGBI blended index, the NCREIF Index, the DJ-UBS Commodity index, the HFRI Fund of Funds Index and the Venture Capital Economics Private Equity Index.

The Balanced Index is a blend of market indices and is reflective of the total System's portfolio policy for each time period. In FY 2007, the Balanced Index was comprised of 34% S&P 500; 7% Russell 2000 Index; 12% Morgan Stanley EAFE Index; 3% Morgan Stanley Emerging Markets Free Index; 16% Lehman Aggregate Bond Index; 8% Citigroup World Government Bond Index; 5% Lehman High Yield Index; 5% NCREIF Index; 5% Cambridge Associates US All Private Equity Index; 5% HFRI Fund of Fund Index.

From July 1, 2007 to May 31, 2010, the Balanced Index was comprised of 32% S&P 500; 7% Russell 2000 Index; 10% Morgan Stanley EAFE Index; 3% Morgan Stanley Emerging Markets Free Index; 18% Barclays Capital Aggregate Bond Index; 8% Citigroup World Government Bond Index; 7% Merrill Lynch High Yield Index; 5% NCREIF Property Index; 5% Cambridge Associates US All Private Equity Index; 5% HFRI Fund of Fund Index.

From June 1, 2010 to May 31, 2011, the Balanced Index was comprised of 19% S&P 500; 7% Russell 2000 Index; 10% Morgan Stanley EAFE Index; 3% Morgan Stanley Emerging Markets Free Index; 9% Morgan Stanley World Index; 17% Barclays Capital Aggregate Bond Index; 8% Citigroup World Government Bond Index; 7% Merrill Lynch High Yield Index; 5% NCREIF Property Index; 5% Cambridge Associates US All Private Equity Index; 5% HFRI Fund of Fund Index; 5% Dow Jones-UBS Commodity Index.

From June 1, 2011 to March 31, 2012, the Balanced Index has been comprised of 17% S&P 500; 7% Russell 2000 Index; 9% Morgan Stanley EAFE Index; 7% Morgan Stanley Emerging Markets Free Index; 9% Morgan Stanley World Index; 14% Barclays Capital Aggregate Bond Index; 8% Citigroup World Government Bond Index; 7% Merrill Lynch High Yield Index; 5% NCREIF Property Index; 5% Cambridge Associates US All Private Equity Index; 5% HFRI Fund of Fund Index; 5% Dow Jones-UBS Commodity Index; 4% JP Morgan Emerging Market Global Bond Index.

From April 1, 2012 to the present, the Balanced Index has been comprised of 15% S&P 500; 7% Russell 2000 Index; 9% Morgan Stanley EAFE Index; 7% Morgan Stanley Emerging Markets Free Index; 9% Morgan Stanley World Index; 16% Barclays Capital Aggregate Bond Index; 6% Citigroup World Government Bond Index; 7% Merrill Lynch High Yield Index; 5% NCREIF Property Index; 5% Cambridge Associates US All Private Equity Index; 5% HFRI Fund of Fund Index; 5% Dow Jones-UBS Commodity Index; 4% JP Morgan Emerging Market Global Bond Index.

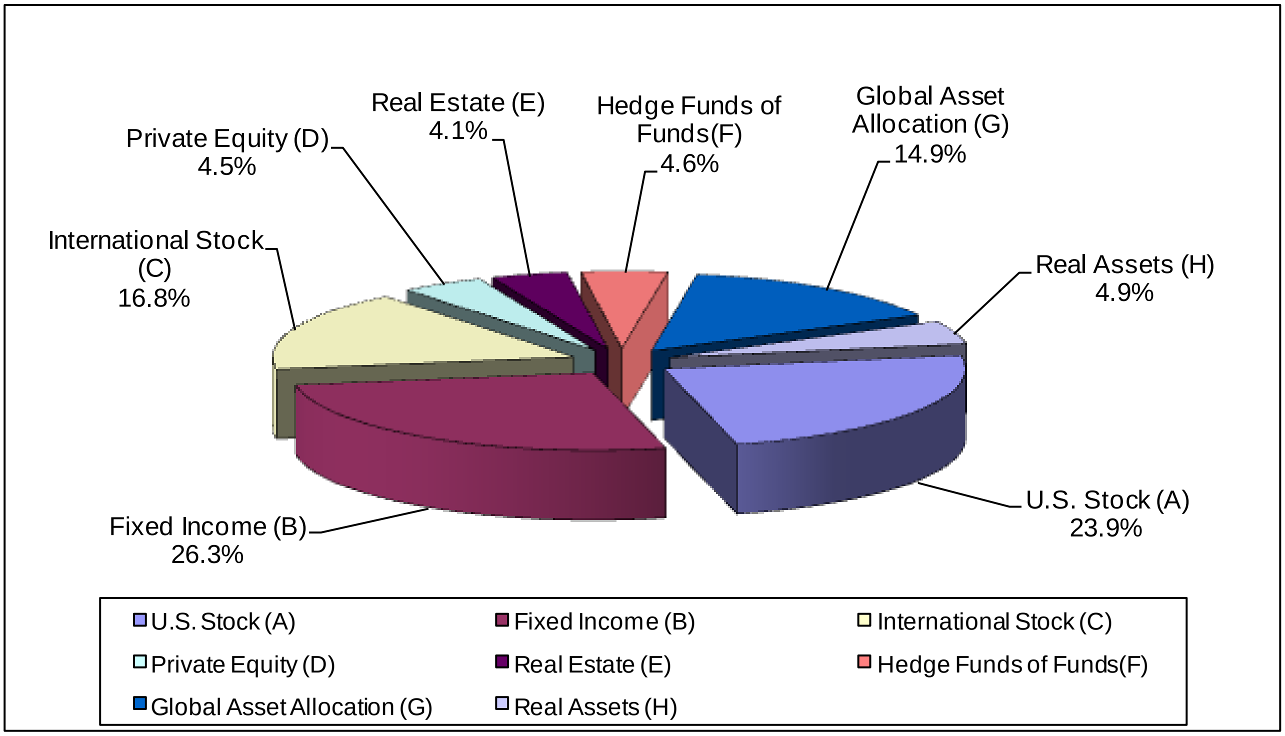
The rate of return measure for the financial asset class managers is time weighted. This investment measure eliminates the influence of contributions and withdrawals that are beyond the control of the investment managers. This investment measure is an effective means of appraising a fund manager's ability to make assets perform.

**Investment Return Summary**
**(Percentage Change)**

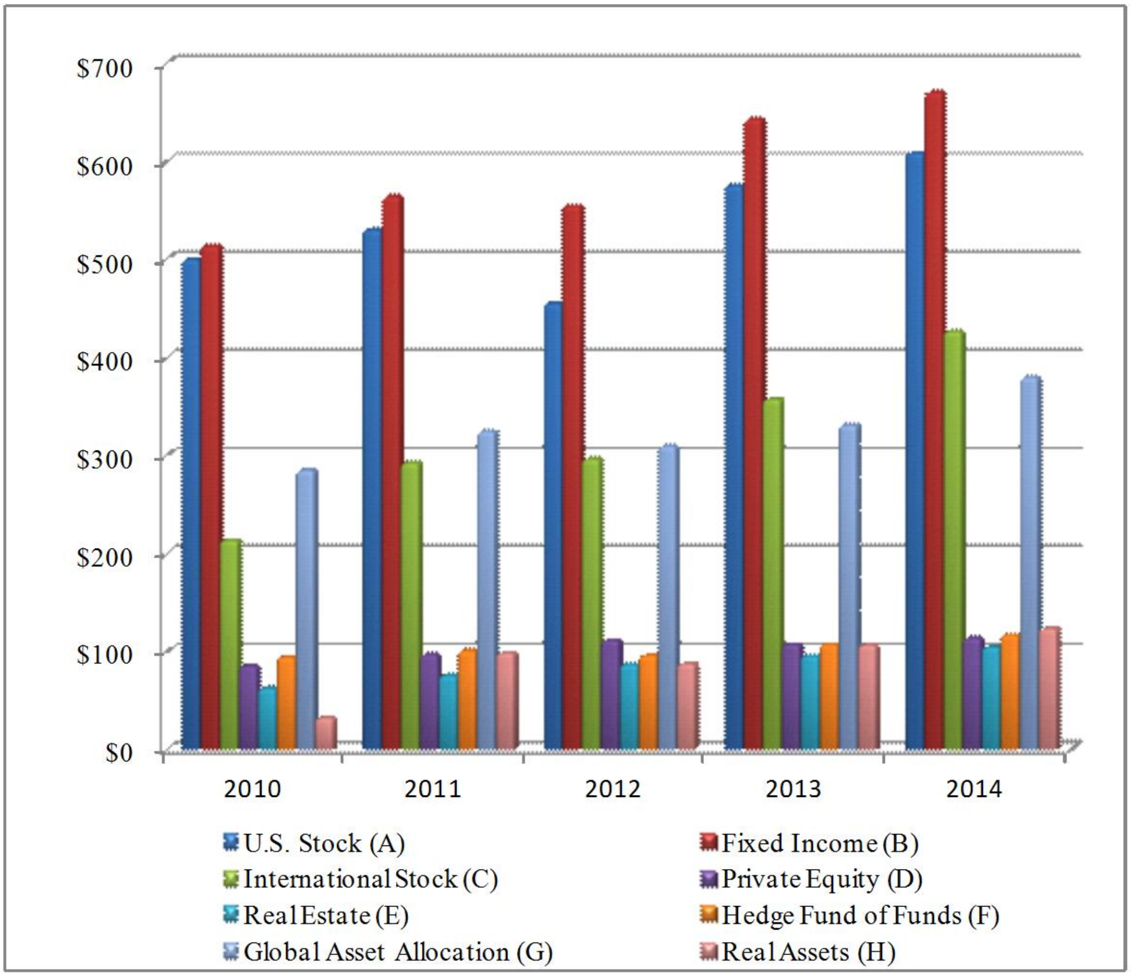
| **Rates of Return** | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 | Annualized Rate Over 3 Years | Annualized Rate Over 5 Years |
|---|---|---|---|---|---|---|---|
| U.S. Common Stock | 17.3% | 34.2% | 1.9% | 24.8% | 25.9% | 17.0% | 20.4% |
| Wilshire 5000 Stock Index | 15.7 | 32.0 | 4.0 | 21.7 | 25.1 | 16.5 | 19.4 |
| International Common Stock | 16.1 | 28.6 | (12.3) | 13.1 | 17.8 | 5.3 | 11.9 |
| MSCI ACWIXUS | 10.4 | 29.7 | (14.6) | 13.6 | 21.8 | 5.7 | 11.1 |
| GAA | 17.0 | 20.4 | 3.5 | 6.4 | 15.5 | 8.3 | 12.5 |
| 60% MSCI World / 40% WGBI & 90– day T-Bills plus 6% | 8.6 | 17.8 | 0.2 | 11.5 | 12.0 | 8.2 | 13.5 |
| Fixed Income | 19.3 | 8.4 | 9.1 | 3.0 | 7.2 | 6.4 | 9.4 |
| Barclays Universal | 10.6 | 4.8 | 7.4 | 0.2 | 5.2 | 4.2 | 5.6 |
| Real Estate | (8.2) | 20.5 | 13.2 | 11.0 | 12.7 | 12.9 | 9.7 |
| NCREIF Index | (1.5) | 16.7 | 12.4 | 10.7 | 11.2 | 11.3 | 9.7 |
| Hedge Funds | 8.8 | 6.3 | (5.7) | 12.3 | 7.7 | 4.5 | 5.5 |
| Hedge Fund-of-Funds Index | 4.7 | 6.7 | (4.5) | 7.4 | 7.6 | 3.3 | 4.2 |
| Private Equity | 12.0 | 14.6 | 9.5 | 7.7 | 9.5 | 9.7 | 13.1 |
| Cambridge Associates US All Private Equity Index | 13.1 | 19.9 | 9.8 | 12.8 | 9.5 | 11.8 | 16.7 |
| Total System Portfolio | 16.4 | 21.0 | 1.7 | 10.7 | 14.8 | 9.0 | 12.8 |
| **Comparative Index** | | | | | | | |
| Balanced Index | 12.5 | 19.4 | 0.8 | 9.4 | 14.7 | 8.1 | 11.1 |
| **Inflation Rate** | | | | | | | |
| Consumer Price Index | 1.1 | 3.6 | 1.7 | 1.8 | 2.0 | 1.9 | 2.1 |

Note: Performance is gross of fees.

**Portfolio Composition by Manager Type**
**Market Value of Investments**
**Percent of Total Fund**
**As of June 30, 2014**



**Portfolio Composition by Manager Type**
**Market Value of Investments**
**Percent of Total Fund**
**As of June 30, 2010, 2011, 2012, 2013 & 2014**
(Expressed in Millions)




| Investment Type | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|
| U.S. Stock (A) | $ 500.3 | 28.0% | $ 530.4 | 25.4% | $ 455.2 | 22.8% | $ 575.5 | 24.8% | $ 609.1 | 23.9% |
| Fixed Income (B) | 514.1 | 28.7 | 564.4 | 27.1 | 555.0 | 27.7 | 643.7 | 27.7 | 670.9 | 26.3 |
| International Stock (C) | 213.9 | 12.0 | 292.9 | 14.0 | 296.7 | 14.8 | 357.6 | 15.4 | 427.1 | 16.8 |
| Private Equity (D) | 85.4 | 4.8 | 97.2 | 4.7 | 111.7 | 5.6 | 107.7 | 4.6 | 114.1 | 4.5 |
| Real Estate (E) | 62.7 | 3.5 | 75.7 | 3.6 | 87.1 | 4.4 | 96.0 | 4.1 | 104.7 | 4.1 |
| Hedge Fund of Funds (F) | 94.5 | 5.3 | 101.2 | 4.9 | 96.4 | 4.8 | 107.8 | 4.6 | 117.3 | 4.6 |
| Global Asset Alloc. (G) | 285.2 | 15.9 | 325.4 | 15.6 | 310.0 | 15.5 | 331.3 | 14.2 | 380.2 | 14.9 |
| Real Assets (H) | 32.7 | 1.8 | 98.9 | 4.7 | 87.9 | 4.4 | 107.0 | 4.6 | 123.7 | 4.9 |
| Total | $1,788.8 | 100.0% | $2,086.1 | 100.0% | $2,000.0 | 100.0% | $2,326.6 | 100.0% | $2,547.1 | 100.0% |

## List of Largest Assets Held*

(Year Ended June 30, 2014)

| | **Ten Largest Equity Holdings** (STOCKS) | PAR VALUE/ SHARES | MARKET VALUE |
|---|---|---|---|
| 1) | Measurement Specialties, Inc. | 45,763 | $3,938,835 |
| 2) | Fresenius SE & Co. | 26,019 | 3,879,447 |
| 3) | Wells Fargo & Co. | 67,187 | 3,531,368 |
| 4) | NETSCOUT Systems, Inc. | 78,904 | 3,498,625 |
| 5) | COGNEX Corp. | 90,993 | 3,494,139 |
| 6) | Tyler Technologies, Inc. | 36,398 | 3,319,875 |
| 7) | Manhattan Associates, Inc. | 96,231 | 3,313,217 |
| 8) | Berkshire Hathaway Inc. | 26,096 | 3,302,747 |
| 9) | FEI Co. | 36,133 | 3,278,377 |
| 10) | ING GROEP N.V. CVA EURO.24 | 231,612 | 3,253,559 |

| | **Ten Largest Fixed Income Holdings** (NOTES & BONDS) | INTEREST RATE | MATURITY DATE | PAR VALUE/ SHARES | MARKET VALUE |
|---|---|---|---|---|---|
| 1) | US Treasury Note | 0.250% | 05/31/2015 | 22,205,641 | $22,233,398 |
| 2) | US Treasury Note | 0.250 | 09/30/2015 | 7,562,508 | 7,570,448 |
| 3) | US Treasury Note | 2.750 | 11/15/2023 | 3,229,911 | 3,310,401 |
| 4) | US Treasury Note | 1.500 | 01/31/2019 | 2,765,395 | 2,763,680 |
| 5) | US Treasury Bond | 2.750 | 08/15/2042 | 2,869,585 | 2,566,500 |
| 6) | Commit to Purchase FNMA SF MTG | 4.000 | 08/01/2044 | 2,170,639 | 2,296,732 |
| 7) | Commit to Purchase GNMA II Jumbos | 3.500 | 07/20/2044 | 2,170,639 | 2,261,025 |
| 8) | GNMA Pool #OAD0091 | 2.730 | 06/15/2032 | 2,115,020 | 2,092,411 |
| 9) | Federal NATL MTG ASSN | 1.000 | 09/20/2017 | 2,088,155 | 2,082,621 |
| 10) | US Treasury Note | 4.750 | 08/15/2017 | 1,832,000 | 2,047,703 |

*A complete list of the portfolio holdings is available upon request.

## Supplementary Supporting Schedules
## Schedule of Fees
(Year Ended June 30, 2014)
(in Thousands)

| Investment Services | Assets Under Management* | Fees |
|---|---|---|
| Domestic Equity Managers | $ 609,081 | $ 3,839 |
| International Equity Managers | 427,131 | 2,167 |
| Fixed Income Managers | 685,165 | 4,913 |
| Private Equity Managers | 114,144 | 1,896 |
| Real Estate Managers | 104,665 | 1,153 |
| Hedge Fund of Funds Managers | 117,308 | 719 |
| Global Asset Allocation Managers | 380,217 | 2,838 |
| Real Assets | 123,672 | 658 |
| Short-Term Investment Manager | 5,781 | - |
| Other Investment Service Fees: | | |
| Custodian | | 220 |
| Security lending – Agent Fees | | 91 |
| Security lending – Borrower rebates | | (246) |
| Investment consultant | | 297 |
| Total | $2,547,164 | $18,545 |

*Asset Under Management" shown above in the amount of $2,547,164 includes short-term investments of $32,130, accrued interest and dividends receivable of $2,320, receivables for investments sold of $38,889 and payables for investments purchased of $47,192. These items are separately reported from "Total Investments" in the Statement of Fiduciary Net Position.

## Supplementary Supporting Schedules
## Schedule of Commissions
(Year Ended June 30, 2014)

| Investment Broker Firms | Number of Shares Traded | Total Commissions | Commission Per Share |
|---|---|---|---|
| BNY Convergex, New York | 598,013 | $ 17,922 | 0.03 |
| Citigroup GBL MKTS/Salomon, NY | 165,123 | 14,700 | 0.09 |
| Cabrera Capital Markets, Chicago | 558,366 | 12,818 | 0.02 |
| Investment Technology Group, New York | 402,198 | 12,332 | 0.03 |
| Williams Capital Group LP, Jersey City | 549,597 | 11,910 | 0.02 |
| Loop Capital Markets, Jersey City | 518,930 | 11,883 | 0.02 |
| Barclays Capital LE, Jersey City | 652,136 | 11,556 | 0.02 |
| Deutsche BK Secs. Inc, NY | 531,976 | 10,887 | 0.02 |
| Jonestrading Instl. Svcs. LLC, Westlake | 398,749 | 9,159 | 0.02 |
| Needham & Co., New York | 179,560 | 6,761 | 0.04 |
| Stifel Nicolaus | 206,694 | 6,691 | 0.03 |
| Sidoti & Co. LLC, New York | 159,118 | 6,112 | 0.04 |
| Morgan Stanley & Co. Inc, NY | 307,223 | 5,243 | 0.02 |
| Miscellaneous (Under $6,000) | 8,361,538 | 120,702 | 0.01 |
| Total | 13,589,221 | $258,676 | |

## Investment Summary

(Year Ended June 30, 2014)
(in Thousands)

| TYPE OF INVESTMENTS | FAIR VALUE | % of FAIR VALUE |
|---|---|---|
| Fixed Income: | | |
| U.S. Government & Agencies Securities | $149,777 | 5.9% |
| Municipals | 5,220 | 0.2 |
| Corporate Bonds | 115,360 | 4.6 |
| Foreign Debt | 18,341 | 0.7 |
| Commingled Fixed Income Funds | 373,351 | 14.8 |
| Total Fixed Income | $662,049 | 26.2% |
| Common Stock: | | |
| Basic Materials | $25,715 | 1.0% |
| Consumer Goods | 54,825 | 2.2 |
| Consumer Service | 40,685 | 1.6 |
| Energy | 48,586 | 1.9 |
| Financials | 95,620 | 3.8 |
| Health Care | 77,009 | 3.1 |
| Industrials | 115,767 | 4.6 |
| Technology | 83,477 | 3.3 |
| Telecommunications | 26,698 | 1.1 |
| Utilities | 4,123 | 0.2 |
| Total Common Stock | $572,505 | 22.8% |
| Other Investments: | | |
| Commingled Equity Funds | $446,457 | 17.7% |
| Real Estate Equity Funds | 104,665 | 4.2 |
| Hedge Funds | 117,307 | 4.6 |
| Private Equity Funds | 114,144 | 4.5 |
| Real Assets | 123,672 | 4.9 |
| Global Asset Allocation Funds | 380,218 | 15.1 |
| Total Other Investments | $1,286,463 | 51.0% |
| Total Investments at fair value* | $ 2,521,017 | 100.0% |

*The Total Investments at fair value shown above in the amount of $2,521,017 does not include short-term investments of $32,130, accrued interest and dividends receivable of $2,344, receivables for investments sold of $38,889 and payables for investments purchased of $47,192. These items are separately reported from "Total Investments" in the Statement of Fiduciary Net Position.

# ACTUARIAL SECTION

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A Xerox Company

**Actuary's Certification Letter**

April 25, 2014

Board of Trustees
Employees' Retirement System of Baltimore County
400 Washington Avenue
Towson, Maryland 21204

Members of the Board:

Actuarial valuations of the Employees' Retirement System of Baltimore County are performed annually. The results of the latest actuarial valuation of the System, which was prepared as of June 30, 2013, are presented in the valuation report. The valuation reflects the benefits in effect on the valuation date, and was prepared on the basis of the data submitted by the County and the actuarial assumptions as adopted by the Board of Trustees. The actuarial assumptions and methods comply with the parameters set forth in Statement No. 25 of the Governmental Accounting Standards Board (GASB).

**Financing Objective and Contribution Appropriation**

The results of the June 30, 2013 valuation determine the contribution appropriation for the fiscal year ending June 30, 2015. The financing objectives of the System are to:

(a) fully fund all current costs based on the normal contribution payable determined under the funding method; and

(b) liquidate the unfunded accrued liability based on accrued liability contributions payable over an amortization period of 30 years (the increase in the unfunded accrued liability attributable to the FY 2012 Retirement Incentive Plan window is being amortized over 10 years).

**Assets and Participant Data**

The County reported the individual data for members of the System as of the valuation date to the actuary. While we did not verify the data at their source, we did perform tests for internal consistency and reasonability in relation to the data submitted for the previous valuation.

The amount of current assets in the trust fund taken into account in the valuation was based on statements prepared for us by the County.

**Actuarial Assumptions and Methods**

The actuarial asset valuation method is a 10-year moving market method that spreads the difference between actual investment income and expected income (based on the valuation interest rate) over a period of 10 years, as adopted for valuation purposes effective June 30, 2010.

The valuation interest rate was changed from 7.25% to 7.00% as of June 30, 2013. In addition, the salary scale assumption and several demographic assumptions were changed as a result of the July 1, 2006 – June 30, 2011 experience study. Apart from these changes, all other assumptions used in this valuation are the same as those used in the June 30, 2012 actuarial valuation.

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202.296.7264 • 202.223.8716 fax

Board of Trustees
April 25, 2014
Page 2

Effective with the fiscal 2003 contribution, all administrative and operating expenses of the System are paid from System assets. As a result, the normal cost includes these expenses.

Included in the valuation report is a summary of the actuarial assumptions and methods used to prepare the actuarial valuation results.

**Experience Study**

Baltimore County regularly analyzes how actual experience compares to the actuarial assumptions. The results of the July 1, 2006 – June 30, 2011 experience study were adopted by the Board at its January 2014 meeting. These assumption changes are discussed in Section 1 of the valuation report. In the course of preparing the June 30, 2013 valuation, we have determined the financial impact of these changes in assumptions.

**Funding Adequacy**

The results of the valuation indicate that the recommended contribution appropriation is adequate to fund the actuarial liabilities on account of all benefits payable under the System, when taken together with member contributions and with the current assets of the System. Included in the valuation report are contribution and funding progress schedules prepared by the actuary.

**Financial Results and Membership Data**

Detailed summaries of the financial results of the valuation and membership data used in preparing the valuation are shown in the valuation report. The actuary prepared supporting schedules and required supplementary information included in the Actuarial Section, Financial Section, and Statistical Section of the Comprehensive Annual Financial Report.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as: plan experience different from that anticipated by the economic and demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

We are Members of the Society of Actuaries and Members of the American Academy of Actuaries. We meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about it.

Respectfully submitted,

Marcia A. Dush

Marcia Dush, FSA, EA, MAAA
Principal and Consulting Actuary

Jennie Pilkington

Jennie Pilkington, ASA, EA, MAAA
Director and Consulting Actuary

Stephen Robb, FSA, EA, MAAA
Director and Consulting Actuary


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## Summary of Actuarial Assumptions and Methods

### ASSUMPTIONS

**Interest Rate:** 7.00% per annum, compounded annually. The valuation interest rate was changed from 7.25% to 7.00% as of June 30, 2013.

**Inflation:** 3.0% per annum.

**Salary Increase:** Sample rates are as follows:

| Age | Annual Rates of Salary Increase | | |
|---|---|---|---|
| | Fiscal Year 2014 – Fiscal Year 2016 | | Fiscal Year 2017 and thereafter |
| | General Employees, Correctional Officers and Deputy Sheriffs | Police Officers and Firefighters | All Members |
| 25 | 6.40% | 6.55% | 6.55% |
| 30 | 4.90 | 5.05 | 5.05 |
| 35 | 3.90 | 4.05 | 4.05 |
| 40 | 3.40 | 3.55 | 3.55 |
| 45 | 2.90 | 3.05 | 3.05 |
| 50 | 2.40 | 2.55 | 3.00 |
| 55 | 1.90 | 2.30 | 3.00 |
| 60 | 1.90 | 2.30 | 3.00 |
| 65 | 1.90 | 2.30 | 3.00 |

The effect of these assumptions is illustrated by the following examples: When used in the valuation process, the age-based rates shown above produce an effective annual average increase of 4.1% over a 27-year career for a Policeman/Fireman hired at age 25, and 3.5% over a 30-year career for a General Employee hired at age 30.

**Future Expenses:** The assumed interest rate is gross of the anticipated future administrative expenses of the fund. All administrative and operating expenses of the System are included in the normal cost.

**Loading or Contingency Reserves:** None

## Summary of Actuarial Assumptions and Methods, continued

**Illustrative Rates of Separation from Service** (adopted as of June 30, 2007)

| | Plan A (Hired Before 7/01/2007) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Withdrawal | | | Disability | | Death | | |
| | | | | | | Ordinary | | |
| Age | Refund Before 10 Years of Service | Refund After 10 Years of Service | Termination Benefit After 10 Years of Service | Ordinary | Accidental | Males | Females | Accidental |
| ***General Employees, Correctional Officers and Deputy Sheriffs*** | | | | | | | | |
| 20 | 12.184% | | | 0.027% | 0.002% | 0.050% | 0.014% | 0.002% |
| 25 | 9.4500 | | | 0.038 | 0.002 | 0.049 | 0.013 | 0.001 |
| 30 | 7.2450 | 1.631% | 0.720% | 0.065 | 0.005 | 0.047 | 0.020 | 0.001 |
| 35 | 6.930 | 1.215 | 0.720 | 0.109 | 0.005 | 0.055 | 0.034 | 0.001 |
| 40 | 6.930 | 1.160 | 0.720 | 0.190 | 0.007 | 0.074 | 0.045 | 0.002 |
| 45 | 6.930 | 1.103 | 0.810 | 0.271 | 0.012 | 0.109 | 0.071 | 0.003 |
| 50 | 5.040 | 0.349 | 0.900 | 0.380 | 0.014 | 0.169 | 0.112 | 0.005 |
| 55 | 3.780 | 0.660 | 1.500 | 0.461 | 0.017 | 0.279 | 0.162 | 0.008 |
| 60 | | | | 0.461 | 0.021 | 0.529 | 0.259 | 0.014 |
| 64 | | | | 0.461 | 0.021 | 0.895 | 0.476 | 0.020 |
| 65 | | | | 0.461 | 0.021 | 1.014 | 0.561 | 0.022 |
| 69 | | | | 0.461 | 0.021 | 1.608 | 1.000 | 0.032 |
| ***Police Officers*** | | | | | | | | |
| 20 | 5.625% | | | 0.023% | 0.090% | 0.028% | 0.008% | 0.008% |
| 25 | 2.925 | | | 0.023 | 0.112 | 0.027 | 0.007 | 0.012 |
| 30 | 2.700 | 0.225% | 0.309% | 0.028 | 0.136 | 0.026 | 0.011 | 0.016 |
| 35 | 1.800 | 0.150 | 0.189 | 0.106 | 0.192 | 0.031 | 0.019 | 0.024 |
| 40 | 1.350 | 0.090 | 0.117 | 0.106 | 0.107 | 0.041 | 0.025 | 0.036 |
| 45 | 1.350 | 0.090 | 0.066 | 0.106 | 0.202 | 0.060 | 0.040 | 0.052 |
| 50 | 0.900 | 0.090 | 0.036 | 0.149 | 0.371 | 0.094 | 0.062 | 0.084 |
| 55 | 0.562 | 0.090 | 0.009 | 0.553 | 0.660 | 0.155 | 0.090 | 0.140 |
| 59 | | | | 0.553 | 1.063 | 0.257 | 0.128 | 0.240 |
| 60 | | | | 0.553 | 1.063 | 0.294 | 0.144 | 0.272 |
| 64 | | | | 0.553 | 1.063 | 0.497 | 0.265 | 0.400 |
| ***Firefighters*** | | | | | | | | |
| 20 | 15.000% | | | 0.046% | 0.017% | 0.028% | 0.008% | 0.008% |
| 25 | 7.800 | | | 0.046 | 0.021 | 0.027 | 0.007 | 0.012 |
| 30 | 7.200 | 0.750% | 1.030% | 0.056 | 0.026 | 0.026 | 0.011 | 0.016 |
| 35 | 4.800 | 0.500 | 0.630 | 0.212 | 0.036 | 0.031 | 0.019 | 0.024 |
| 40 | 3.600 | 0.300 | 0.390 | 0.212 | 0.050 | 0.041 | 0.025 | 0.036 |
| 45 | 3.600 | 0.300 | 0.220 | 0.212 | 0.093 | 0.060 | 0.040 | 0.052 |
| 50 | 2.400 | 0.300 | 0.120 | 0.298 | 0.173 | 0.094 | 0.062 | 0.084 |
| 55 | 1.500 | 0.300 | 0.030 | 0.106 | 0.306 | 0.155 | 0.090 | 0.140 |
| 59 | 0.300 | 0.300 | 0.010 | 0.106 | 0.344 | 0.257 | 0.128 | 0.240 |
| 60 | | | | 0.106 | 0.344 | 0.294 | 0.144 | 0.272 |
| 64 | | | | 0.106 | 0.344 | 0.497 | 0.265 | 0.400 |

## Summary of Actuarial Assumptions and Methods, continued

**Illustrative Rates of Separation from Service** (adopted as of June 30, 2007)

| | Plan B (Hired After 6/30/2007) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Withdrawal | | | Disability | | Death | | |
| | | | | | | Ordinary | | |
| Age | Refund Before 10 Years of Service | Refund After 10 Years of Service | Termination Benefit After 10 Years of Service | Ordinary | Accidental | Males | Females | Accidental |
| ***General Employees, Correctional Officers and Deputy Sheriffs*** | | | | | | | | |
| 20 | 15.225% | | | 0.032% | 0.003% | 0.050% | 0.014% | 0.002% |
| 25 | 11.813 | | | 0.044 | 0.003 | 0.049 | 0.013 | 0.001 |
| 30 | 9.056 | 1.688% | 0.600% | 0.077 | 0.006 | 0.047 | 0.020 | 0.001 |
| 35 | 8.663 | 1.613 | 0.600 | 0.128 | 0.006 | 0.055 | 0.034 | 0.001 |
| 40 | 8.663 | 1.538 | 0.600 | 0.224 | 0.010 | 0.074 | 0.045 | 0.002 |
| 45 | 8.663 | 1.462 | 0.675 | 0.319 | 0.016 | 0.109 | 0.071 | 0.003 |
| 50 | 6.300 | 1.388 | 0.750 | 0.446 | 0.019 | 0.169 | 0.112 | 0.005 |
| 55 | 4.725 | 1.313 | 0.750 | 0.542 | 0.022 | 0.279 | 0.162 | 0.008 |
| 60 | 3.938 | 1.237 | 0.750 | 0.542 | 0.028 | 0.529 | 0.259 | 0.014 |
| 64 | 3.308 | 1.178 | 0.750 | 0.542 | 0.028 | 0.895 | 0.476 | 0.020 |
| 65 | 3.150 | 1.162 | 0.750 | 0.542 | 0.028 | 1.014 | 0.561 | 0.022 |
| 69 | | | | 0.542 | 0.028 | 1.608 | 1.000 | 0.032 |
| ***Police Officers*** | | | | | | | | |
| 20 | 7.500% | | | 0.047% | 0.060% | 0.056% | 0.015% | 0.008% |
| 25 | 3.900 | | | 0.047 | 0.075 | 0.054 | 0.014 | 0.012 |
| 30 | 3.600 | 0.750% | 0.515% | 0.056 | 0.090 | 0.052 | 0.022 | 0.016 |
| 35 | 2.400 | 0.500 | 0.315 | 0.213 | 0.128 | 0.061 | 0.038 | 0.024 |
| 40 | 1.800 | 0.300 | 0.195 | 0.213 | 0.218 | 0.082 | 0.050 | 0.036 |
| 45 | 1.800 | 0.300 | 0.110 | 0.213 | 0.412 | 0.121 | 0.079 | 0.052 |
| 50 | 1.200 | 0.300 | 0.060 | 0.298 | 0.758 | 0.188 | 0.124 | 0.084 |
| 55 | 0.750 | 0.300 | 0.015 | 1.105 | 1.350 | 0.310 | 0.180 | 0.140 |
| 59 | 0.150 | 0.300 | 0.005 | 1.105 | 2.175 | 0.514 | 0.255 | 0.240 |
| 60 | | | | 1.105 | 2.175 | 0.588 | 0.288 | 0.272 |
| 64 | | | | 1.105 | 2.175 | 0.994 | 0.529 | 0.400 |
| ***Firefighters*** | | | | | | | | |
| 20 | 5.000% | | | 0.047% | 0.045% | 0.056% | 0.015% | 0.008% |
| 25 | 2.600 | | | 0.047 | 0.056 | 0.054 | 0.014 | 0.012 |
| 30 | 2.400 | 0.750% | 0.515% | 0.056 | 0.068 | 0.052 | 0.022 | 0.016 |
| 35 | 1.600 | 0.500 | 0.315 | 0.213 | 0.095 | 0.061 | 0.038 | 0.024 |
| 40 | 1.200 | 0.300 | 0.195 | 0.213 | 0.131 | 0.082 | 0.050 | 0.036 |
| 45 | 1.200 | 0.300 | 0.110 | 0.213 | 0.247 | 0.121 | 0.079 | 0.052 |
| 50 | 0.800 | 0.300 | 0.060 | 0.298 | 0.454 | 0.188 | 0.124 | 0.084 |
| 55 | 0.500 | 0.300 | 0.015 | 1.105 | 0.810 | 0.310 | 0.180 | 0.140 |
| 59 | 0.100 | 0.300 | 0.005 | 1.105 | 0.910 | 0.514 | 0.255 | 0.240 |
| 60 | | | | 1.105 | 0.910 | 0.588 | 0.288 | 0.272 |
| 64 | | | | 1.105 | 0.910 | 0.994 | 0.529 | 0.400 |

## Summary of Actuarial Assumptions and Methods, continued

### Illustrative Retirement Rates for General Employees

| Age | Plan A (Members before July 1, 2007) | | | | | | | | | | | | Plan B (Members after June 30, 2007) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Normal Retirement (Age 60 and 5 Years, or 30 Years)[1] | | | | | | | | | Front DROP Retirement | | |
| | | Under Age 60 at June 30, 2007 | | | | | | | | | | | |
| | Early Retirement (Age 55 with 20 Years) | 5-9 Years of Service | | 10-19 Years of Service | | 20-29 Years of Service Without Rule of 85 | | 30 Years or Age 65[2] with 5 Years of Service | | Age 55 and Rule of 85, but not in Front DROP | Under 5 Years of DROP Participation | 5 – 9 Years of DROP Participation | Normal Retirement (Age 67 & 10 Years or 35 Years) |
| | | Not DROP | Will DROP | Not DROP | Will DROP | Not DROP | Will DROP | Not DROP | Will DROP | Not DROP | | | |
| 45 | | | | | | | | 4.97% | 12.44% | | | | |
| 46 | | | | | | | | 4.97 | 12.44 | | | | |
| 47 | | | | | | | | 4.97 | 12.44 | | | | |
| 48 | | | | | | | | 4.97 | 12.44 | | | | |
| 49 | | | | | | | | 4.97 | 12.44 | | | | |
| 50 | | | | | | | | 4.97 | 12.44 | | | | |
| 51 | | | | | | | | 4.97 | 12.44 | | | | |
| 52 | | | | | | | | 4.97 | 12.44 | | | | |
| 53 | | | | | | | | 4.97 | 12.44 | | | | |
| 54 | | | | | | | | 4.97 | 12.44 | 20.00% | | | 11.05% |
| 55 | 13.89% | | | | | | | 4.97 | 12.44 | 20.00 | | | 11.05 |
| 56 | 4.39 | | | | | | | 4.97 | 12.44 | 20.00 | | | 11.05 |
| 57 | 2.93 | | | | | | | 4.97 | 12.44 | 20.00 | | | 11.05 |
| 58 | 4.68 | | | | | | | 4.97 | 12.44 | 20.00 | | | 11.05 |
| 59 | 6.58 | | | | | | | 4.97 | 12.44 | 20.00 | 10.00% | | 11.05 |
| 60 | | 4.00% | 1.50% | 8.00% | 22.50% | 20.00% | 45.00% | 4.97 | 12.44 | 20.00 | 10.00 | 5.00% | 11.05 |
| 61 | | 4.00 | 1.50 | 8.00 | 22.50 | 20.00 | 45.00 | 9.53 | 14.30 | 25.00 | 20.00 | 10.00 | 12.71 |
| 62 | | 4.00 | 1.50 | 8.00 | 22.50 | 20.00 | 15.00 | 10.40 | 26.01 | 25.00 | 20.00 | 15.00 | 23.11 |
| 63 | | 4.00 | 1.50 | 20.00 | 22.50 | 20.00 | 15.00 | 7.42 | 18.56 | 20.00 | 00.00 | 20.00 | 16.48 |
| 64 | | 4.00 | 1.50 | 20.00 | 22.50 | 20.00 | 15.00 | 8.41 | 21.03 | 20.00 | 00.00 | 25.00 | 18.69 |
| 65 | | | | | | | | 13.64 | 34.10 | 25.00 | 20.00 | 30.00 | 30.29 |
| 66 | | | | | | | | 11.60 | 29.00 | 20.00 | 00.00 | 35.00 | 25.76 |
| 67 | | | | | | | | 11.00 | 27.50 | 20.00 | 0000 | 40.00 | 24.44 |
| 68 | | | | | | | | 10.40 | 26.01 | 20.00 | 00.00 | 45.00 | 23.11 |
| 69 | | | | | | | | 9.91 | 24.77 | 20.00 | 00.00 | 50.00 | 22.01 |
| 70 | | | | | | | | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

1. Members not meeting Front DROP entry requirements by age 65 are assumed to retire at the unreduced rates shown above. Members who meet the Front DROP entry requirements by age 65 are assumed to (a) retire at the reduced rates shown above prior to entering the DROP; (b) 8% of members enter the Front DROP as soon as they are eligible; and (c) retire normally (5%) or with Front DROP benefits (95%) at the Front DROP retirement rates shown based on Front DROP participation service. The Front DROP retirement rate becomes 100% upon completion of ten years of DROP participation, or attainment of age 70, whichever occurs first.
2. Substitute 60 for 65 if the member was age 60 or older on or before 6/30/07.

## Summary of Actuarial Assumptions and Methods, continued

**Illustrative Retirement Rates for Correctional Officers and Deputy Sheriffs**

| Age | Plan A (Members hired before 7/01/2007)[1] | | | | | | Plan B (Hired After 6/30/2007) |
|---|---|---|---|---|---|---|---|
| | Age 60 with 5-9 Years of Service | Age 60 with 10-19 Years of Service | | 20-26 Years of Service | | 27 Years of Service | Retirement (Age 67 & 10 Years or 25 Years) |
| | Will Not be DROP Eligible | Will Not be DROP Eligible | Will be DROP Eligible | Will Not be DROP Eligible | Will be DROP Eligible[2] | Will be DROP Eligible | |
| 40 | | | | 3.39% | 2.54% | | |
| 41 | | | | 3.39 | 2.54 | | |
| 42 | | | | 3.39 | 2.54 | | |
| 43 | | | | 3.39 | 2.54 | | |
| 44 | | | | 3.39 | 2.54 | | |
| 45 | | | | 3.39 | 2.54 | 17.19% | 14.95% |
| 46 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 47 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 48 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 49 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 50 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 51 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 52 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 53 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 54 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 55 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 56 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 57 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 58 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 59 | | | | 3.39 | 2.54 | 17.19 | 14.95 |
| 60 | 4.00% | 10.00% | 7.50% | 3.39 | 2.54 | 17.19 | 14.95 |
| 61 | 4.00 | 12.00 | 9.00 | 5.97 | 4.48 | 19.77 | 17.19 |
| 62 | 4.00 | 14.00 | 10.50 | 22.17 | 16.62 | 35.97 | 31.27 |
| 63 | 4.00 | 16.00 | 12.00 | 11.85 | 8.88 | 25.65 | 22.30 |
| 64 | 4.00 | 18.00 | 13.50 | 15.28 | 11.46 | 29.08 | 25.29 |
| 65 | 4.00 | 20.00 | 15.00 | 27.59 | 20.69 | 41.14 | 40.99 |
| 66 | 4.00 | 22.00 | 16.50 | 20.54 | 15.40 | 34.39 | 34.86 |
| 67 | 4.00 | 24.00 | 18.00 | 18.47 | 13.85 | 32.27 | 33.06 |
| 68 | 4.00 | 26.00 | 19.50 | 16.41 | 12.31 | 30.21 | 31.27 |
| 69 | 4.00 | 28.00 | 21.00 | 14.69 | 11.01 | 28.49 | 29.77 |
| 70 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

1. Members meeting the service requirement for the Back DROP by age 70 are assumed to retire at the reduced rates shown above prior to eligibility. Members not qualifying for the Back DROP are assumed to retire at the unreduced retirement rates shown above. An additional 20% is applied at the point when a member is first eligible to retire under the Back DROP. Also, an additional 25% is applied at the point when a member first reaches the 25-year service point due to the added health care subsidy. 95% of eligible members are assumed to elect the Back DROP.

2. Members with 20-24 years and 26 years of service retire at 20% per year.

## Summary of Actuarial Assumptions and Methods, continued

### Illustrative Retirement Rates for Police Officers

| Age | Plan A (Members hired before 7/01/2007)[1] Age 55 with 5-9 Years of Service: Will Not be DROP Eligible | Age 55 with 10-19 Years of Service: Will Not be DROP Eligible | Age 55 with 10-19 Years of Service: Will be DROP Eligible | 20 Years of Service: Will Not be DROP Eligible[2] | 20 Years of Service: Will be DROP Eligible[3] | Plan B (Hired After 6/30/2007) Retirement (Age 60 & 10 Years or 25 Years) |
|---|---|---|---|---|---|---|
| 40 | | | | 5.16% | 3.87% | |
| 41 | | | | 5.21 | 3.91 | |
| 42 | | | | 5.26 | 3.95 | |
| 43 | | | | 5.31 | 3.98 | |
| 44 | | | | 5.34 | 4.01 | |
| 45 | | | | 5.41 | 4.06 | 9.41% |
| 46 | | | | 5.47 | 4.10 | 9.47 |
| 47 | | | | 5.56 | 4.17 | 9.56 |
| 48 | | | | 5.67 | 4.25 | 9.67 |
| 49 | | | | 5.78 | 4.34 | 9.78 |
| 50 | | | | 5.91 | 4.43 | 9.91 |
| 51 | | | | 6.05 | 4.54 | 10.05 |
| 52 | | | | 6.23 | 4.67 | 10.23 |
| 53 | | | | 6.44 | 4.83 | 10.44 |
| 54 | | | | 6.69 | 5.02 | 10.69 |
| 55 | 3.00% | 25.00% | 18.75% | 15.30 | 11.48 | 19.30 |
| 56 | 3.00 | 30.00 | 22.50 | 13.79 | 10.34 | 17.79 |
| 57 | 3.00 | 35.00 | 26.25 | 5.86 | 4.40 | 9.86 |
| 58 | 3.00 | 40.00 | 30.00 | 6.07 | 4.55 | 10.07 |
| 59 | 3.00 | 45.00 | 33.75 | 6.41 | 4.81 | 10.41 |
| 60 | 3.00 | 50.00 | 37.50 | 95.00 | 71.25 | 95.00 |
| 61 | 3.00 | 55.00 | 41.25 | 40.00 | 30.00 | 40.00 |
| 62 | 3.00 | 60.00 | 45.00 | 75.00 | 56.25 | 75.00 |
| 63 | 3.00 | 65.00 | 48.75 | 50.00 | 37.50 | 50.00 |
| 64 | 3.00 | 70.00 | 52.50 | 50.00 | 37.50 | 50.00 |
| 65 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

1. Members meeting the service requirement for the Back DROP by age 65 are assumed to retire at the reduced rates shown above prior to eligibility. Members not qualifying for the Back DROP are assumed to retire at the unreduced retirement rates shown above. An additional 10% (5% if under age 50) is applied at the point when a member is first eligible to retire under the Back DROP. Also, an additional 10% (2% if age 45 or older) is applied at the point when a member first reaches the 25-year service point due to the added health care subsidy. 80% of eligible members are assumed to elect the Back DROP.

2. Members age 45 and older with 27 years of service retire at 50% of the rates shown, plus an additional 5%. Members age 60 and age 60 with over 27 years of service are assumed to retire at a rate of 50% per year.

3. Members age 45-49 with 20-24 years of service are assumed to retire at a rate of 3% per year. Members under age 50 with 25 years of service retire at 20% of the rates shown, plus an additional 2%.

## Summary of Actuarial Assumptions and Methods, continued

### Illustrative Retirement Rates for Firefighters

| | Plan A (Members hired before 7/01/2007)[1] | | | | | | Plan B (Hired After 6/30/2007) |
|---|---|---|---|---|---|---|---|
| | Age 60 with 5-9 Years of Service | Age 60 with 10-19 Years of Service | Age 50 with 20-24 Years of Service | | 25 Years of Service | | Retirement (Age 67 & 10 Years or 25 Years) |
| Age | Will Not be DROP Eligible | Will Not be DROP Eligible | Will Not be DROP Eligible | Will be DROP Eligible | Will Not be DROP Eligible[2] | Will be DROP Eligible[3] | |
| 44 | | | | | 12.00% | 9.00% | |
| 45 | | | | | 12.00 | 9.00 | |
| 46 | | | | | 12.00 | 9.00 | |
| 47 | | | | | 12.00 | 9.00 | |
| 48 | | | | | 12.00 | 9.00 | |
| 49 | | | | | 12.00 | 9.00 | 12.00% |
| 50 | | | 2.00% | 1.50% | 10.25 | 7.69 | 10.25 |
| 51 | | | 2.00 | 1.50 | 10.40 | 7.80 | 10.40 |
| 52 | | | 2.00 | 1.50 | 10.58 | 7.94 | 10.58 |
| 53 | | | 2.00 | 1.50 | 10.80 | 8.10 | 10.80 |
| 54 | | | 2.00 | 1.50 | 11.05 | 7.94 | 11.05 |
| 55 | | | 2.00 | 1.50 | 19.89 | 7.94 | 19.89 |
| 56 | | | 2.00 | 1.50 | 18.32 | 7.94 | 18.32 |
| 57 | | | 2.00 | 1.50 | 10.10 | 7.94 | 10.10 |
| 58 | | | 2.00 | 1.50 | 10.31 | 7.94 | 10.31 |
| 59 | | | 2.00 | 1.50 | 10.65 | 7.94 | 10.65 |
| 60 | 4.00% | 10.00% | 2.00 | 1.50 | 85.00 | 7.94 | 85.00 |
| 61 | 4.00 | 12.00 | 2.00 | 1.50 | 35.00 | 7.94 | 35.00 |
| 62 | 4.00 | 14.00 | 2.00 | 1.50 | 60.00 | 7.94 | 60.00 |
| 63 | 4.00 | 16.00 | 2.00 | 1.50 | 40.00 | 7.94 | 40.00 |
| 64 | 4.00 | 18.00 | 2.00 | 1.50 | 50.00 | 7.94 | 50.00 |
| 65 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 7.94 | 100.00 |

1. Members meeting the service requirement for the Back DROP by age 65 are assumed to retire at the reduced rates shown above prior to eligibility. Members not qualifying for the Back DROP are assumed to retire at the unreduced retirement rates shown above. An additional 10% is applied at the point when a member is first eligible to retire under the Back DROP. Also, an additional 10% (5% if age 45-49) is applied at the point when a member first reaches the 25-year service point due to the added health care subsidy. 85% of eligible members are assumed to elect the Back DROP.

2. Members with over 32 years of service retire at 200% of the rates shown.

3. Members age 45-49 with 25 years of service retire at 50% of the rates shown, plus an additional 5%.

## Summary of Actuarial Assumptions and Methods, continued

**Death After Retirement:** The mortality for service retirements and dependent beneficiaries is 108% of the RP-2000 Healthy Annuitant Table for males, projected to 2027 with Scale AA and 100% of the RP-2000 Healthy Annuitant Table for females, projected to 2027 with Scale AA. For disability retirements, the mortality tables are the RP-2000 Disabled Annuitant Tables, projected to 2027 with Scale AA. Illustrative rates are shown below:

| | Annual Rates of Mortality | | | |
|---|---|---|---|---|
| | Service Pensioners | | Disability Pensioners | |
| Age | Males | Females | Males | Females |
| 45 | 0.114% | 0.073% | 1.585% | 0.482% |
| 50 | 0.354 | 0.148 | 1.774 | 0.726 |
| 55 | 0.380 | 0.284 | 2.112 | 1.332 |
| 60 | 0.573 | 0.542 | 2.720 | 1.908 |
| 65 | 0.990 | 0.905 | 3.429 | 2.448 |
| 70 | 1.595 | 1.462 | 4.161 | 3.287 |
| 75 | 2.792 | 2.263 | 5.609 | 4.205 |
| 80 | 5.300 | 3.795 | 8.338 | 5.982 |
| 85 | 9.895 | 6.583 | 11.714 | 8.518 |

**Marital Status:** For Firefighters and Police, 90% of active members are assumed to be married. For all other employees, 90% of active males and 50% of active females are assumed to be married. In all cases, it is assumed that the male spouse is 3 years older than the female spouse.

**Credit for Unused Sick Leave:** For members entitled to receive credit for unused sick leave, it was assumed that each member will accumulate such credit as follows:

| | |
|---|---|
| Supervisory, management and confidential (SMC) members, other than firefighters | ¾ year |
| Firefighters including SMC members | 1 year |
| Employees other than Police and Firefighters, excluding SMC members | ½ year |
| Police | ½year |

## Summary of Actuarial Assumptions and Methods, continued

**METHODS**

**Actuarial Cost Method:** Projected Unit Credit. Changes in benefits and assumptions and gains or losses are amortized over 30 years with payments that increase by 3% per annum. The impact of the FY 2012 Retirement Incentive Program window is amortized over 10 years, with payments that increase by 3% per annum.

**Asset Valuation Method:** A ten-year moving average market value of assets that spreads the difference between the actual investment income and the expected income on the market value (based on the valuation interest rate) over a period of ten years. For purposes of this calculation, the gain/(loss) is defined as the difference between the actual and the expected return on the market value of assets. There is no corridor limiting the valuation assets to a certain percentage of the market value. (Adopted as of June 30, 2010)

**Liability Due to Assets in Post-Retirement Increase Fund:** Liabilities for retirees and beneficiaries include the value of assets in the Post-Retirement Increase Fund.

**Payroll Growth:** 3% per annum, compounded annually.

**DATA**

The valuation was based on members of the System as of June 30, 2013 and does not take into account future members. All census data was supplied by the County and was subject to reasonable consistency checks. The County supplied asset data.

## SCHEDULE OF ACTIVE MEMBER VALUATION DATA

### GENERAL EMPLOYEES

| Valuation as of June 30 | Number of Active members | Valuation Payroll | Average Salary | Percent Increase (Decrease) | CPI % Increase |
|---|---|---|---|---|---|
| 2004 | 6,188 | $213,466,762 | $34,497 | 0.8% | 3.3% |
| 2005 | 6,200 | 222,429,135 | 35,876 | 4.0 | 2.5 |
| 2006 | 6,347 | 237,974,768 | 37,494 | 4.5 | 4.3 |
| 2007 | 6,203 | 246,590,348 | 39,753 | 6.0 | 2.7 |
| 2008 | 6,276 | 263,073,480 | 41,917 | 5.4 | 5.0 |
| 2009 | 6,458 | 276,789,524 | 42,860 | 2.2 | (1.4) |
| 2010 | 6,336 | 282,299,161 | 44,555 | 4.0 | 1.1 |
| 2011 | 6,248 | 285,485,138 | 45,692 | 2.6 | 3.6 |
| 2012 | 5,893 | 273,433,117 | 46,400 | 1.5 | 1.7 |
| 2013 | 5,916 | 277,270,227 | 46,868 | 1.0 | 1.8 |

### POLICE OFFICERS

| Valuation as of June 30 | Number of Active members | Valuation Payroll | Average Salary | Percent Increase (Decrease) | CPI % Increase |
|---|---|---|---|---|---|
| 2004 | 1,820 | $94,168,998 | $51,741 | 0.2% | 3.3% |
| 2005 | 1,830 | 99,331,097 | 54,279 | 4.9 | 2.5 |
| 2006 | 1,893 | 113,160,620 | 59,778 | 10.1 | 4.3 |
| 2007 | 1,911 | 117,584,303 | 61,530 | 2.9 | 2.7 |
| 2008 | 1,926 | 133,153,117 | 69,135 | 12.4 | 5.0 |
| 2009 | 1,936 | 142,060,736 | 73,378 | 6.1 | (1.4) |
| 2010 | 1,927 | 144,883,413 | 75,186 | 2.5 | 1.1 |
| 2011 | 1,919 | 148,430,584 | 77,348 | 2.9 | 3.6 |
| 2012 | 1,833 | 140,236,837 | 76,507 | (1.1) | 1.7 |
| 2013 | 1,843 | 146,580,108 | 79,533 | 4.0 | 1.8 |

## Schedule of Active Member Valuation Data, continued

### FIREFIGHTERS

| Valuation as of June 30 | Number of Active members | Valuation Payroll | Average Salary | Percent Increase (Decrease) | CPI % Increase |
|---|---|---|---|---|---|
| 2004 | 1,025 | $52,126,358 | $50,855 | 0.1% | 3.3% |
| 2005 | 999 | 53,487,198 | 53,541 | 5.3 | 2.5 |
| 2006 | 1,006 | 60,276,437 | 59,917 | 11.9 | 4.3 |
| 2007 | 985 | 59,689,970 | 60,599 | 1.1 | 2.7 |
| 2008 | 987 | 65,893,511 | 66,761 | 10.2 | 5.0 |
| 2009 | 985 | 68,906,384 | 69,956 | 4.8 | (1.4) |
| 2010 | 991 | 69,191,965 | 69,820 | (0.2) | 1.1 |
| 2011 | 1,013 | 71,676,716 | 70,757 | 1.3 | 3.6 |
| 2012 | 958 | 66,958,931 | 69,895 | 1.2 | 1.7 |
| 2013 | 939 | 68,076,750 | 72,499 | 3.7 | 1.8 |

### CORRECTIONAL OFFICERS AND DEPUTY SHERIFFS

| Valuation as of June 30 | Number of Active members | Valuation Payroll | Average Salary | Percent Increase (Decrease) | CPI % Increase |
|---|---|---|---|---|---|
| 2004 | 287 | $10,876,631 | $37,898 | 1.8% | 3.3% |
| 2005 | 332 | 12,804,147 | 38,567 | 1.8 | 2.5 |
| 2006 | 339 | 13,988,510 | 41,264 | 7.0 | 4.3 |
| 2007 | 372 | 16,048,623 | 43,141 | 4.5 | 2.7 |
| 2008 | 381 | 17,534,096 | 46,021 | 6.7 | 5.0 |
| 2009 | 393 | 19,151,020 | 48,730 | 5.9 | (1.4) |
| 2010 | 379 | 18,750,737 | 49,474 | 1.5 | 1.1 |
| 2011 | 391 | 19,729,598 | 50,459 | 2.0 | 3.6 |
| 2012 | 398 | 21,024,482 | 52,825 | 4.7 | 1.7 |
| 2013 | 401 | 21,574,912 | 53,803 | 1.9 | 1.8 |

## Schedule of Active Member Valuation Data, continued

### ALL GROUPS

| Valuation as of June 30 | Number of Active Members | Valuation Payroll | Average Salary | Percent Increase (Decrease) | CPI % Increase |
|---|---|---|---|---|---|
| 2004 | 9,320 | $370,638,749 | $39,768 | 0.7% | 3.3% |
| 2005 | 9,361 | 388,051,577 | 41,454 | 4.2 | 2.5 |
| 2006 | 9,585 | 425,400,335 | 44,382 | 7.1 | 4.3 |
| 2007 | 9,471 | 439,913,244 | 46,448 | 4.7 | 2.7 |
| 2008 | 9,570 | 479,654,204 | 50,121 | 7.9 | 5.0 |
| 2009 | 9,772 | 506,907,664 | 51,873 | 3.5 | (1.4) |
| 2010 | 9,633 | 515,125,276 | 53,475 | 3.1 | 1.1 |
| 2011 | 9,571 | 525,322,036 | 54,887 | 2.6 | 3.6 |
| 2012 | 9,082 | 501,653,367 | 55,236 | 0.6 | 1.7 |
| 2013 | 9,099 | 513,501,997 | 56,435 | 2.2 | 1.8 |

### SCHEDULE OF RETIREE AND BENEFICIARY DATA

| Valuation as of June 30 | Added to Rolls | | Removed from Rolls | | Rolls – End of Year | | Percent Increase In Annual Allowances | Average Annual Allowances |
|---|---|---|---|---|---|---|---|---|
| | Number | Annual* Allowances | Number | Annual Allowances | Number | Annual Allowances | | |
| 2004 | 275 | $7,626,181 | 150 | $2,176,764 | 5,894 | $106,439,152 | 5.4% | $18,059 |
| 2005 | 349 | $7,886,485 | 206 | $2,109,495 | 6,037 | $112,216,142 | 5.4% | $18,588 |
| 2006 | 306 | 9,198,231 | 171 | 2,059,100 | 6,172 | 119,355,273 | 6.4 | 19,338 |
| 2007 | 405 | 10,144,583 | 176 | 2,416,858 | 6,401 | 127,082,998 | 6.5 | 19,854 |
| 2008 | 249 | 8,616,484 | 200 | 2,091,325 | 6,450 | 133,608,157 | 5.1 | 20,714 |
| 2009 | 281 | 13,789,920 | 221 | 2,802,573 | 6,510 | 144,595,504 | 8.2 | 22,211 |
| 2010 | 395 | 12,662,248 | 201 | 3,237,920 | 6,704 | 154,019,832 | 6.5 | 22,974 |
| 2011 | 303 | 12,530,487 | 235 | 3,946,193 | 6,772 | 162,604,126 | 5.6 | 24,011 |
| 2012 | 664 | 24,367,514 | 205 | 3,204,235 | 7,231 | 183,767,405 | 13.0 | 25,414 |
| 2013 | 380 | 14,175,414 | 229 | 3,181,871 | 7,382 | 194,760,948 | 6.0 | 26,383 |

*Cost of Living Increases included here.

## Solvency Test

Baltimore County's funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the system are level in concept and soundly executed, the system will pay all promised benefits when due – the ultimate test of financial soundness. Testing for level contribution rates is the long-term test.

A short conditions test is one means of checking a system's progress under its funding program. In a short condition test, the system's present assets (cash and investments) are compared with: (1) the liabilities for future benefits to present retired lives; (2) the liabilities for service already rendered by active members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for future benefits to present retired lives (liability B) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability A & C) will be at least partially covered by the remainder of present assets. Generally, if the system has been using level cost financing, the funded portion of liability A & C will increase over time. This is the relationship between accrued liabilities and assets of the System over the last ten years:

| | Accrued Liability for: | | | | Portion of Accrued Liability Covered by Actuarial Value of Assets | | |
|---|---|---|---|---|---|---|---|
| Valuation as of June 30 | (A) Active Member Contribution | (B) Retirees and Beneficiaries | (C) Active Member Employer Financed | Actuarial Value of Assets | (A) | (B) | (C) |
| 2004[1] | $309,108,608 | $969,870,802 | $645,563,619 | $ 1,803,810,968 | 100.0% | 100.0% | 81.3% |
| 2005[2] | 325,300,280 | 1,044,483,625 | 579,827,565 | 1,832,922,033 | 100.0 | 100.0 | 79.9 |
| 2006 | 348,756,395 | 1,082,484,348 | 647,571,148 | 1,938,817,402 | 100.0 | 100.0 | 78.4 |
| 2007[3] | 363,778,826 | 1,247,373,485 | 678,300,211 | 2,101,023,411 | 100.0 | 100.0 | 72.2 |
| 2008[4] | 391,743,335 | 1,307,885,347 | 791,713,328 | 2,191,623,378 | 100.0 | 100.0 | 62.1 |
| 2009[5] | 417,514,605 | 1,359,000,212 | 823,155,619 | 2,143,616,137 | 100.0 | 100.0 | 44.6 |
| 2010[6] | 447,377,958 | 1,446,963,230 | 851,674,652 | 2,196,914,646 | 100.0 | 100.0 | 35.5 |
| 2011 | 473,082,150 | 1,484,234,414 | 906,536,155 | 2,213,857,844 | 100.0 | 100.0 | 28.3 |
| 2012[7] | 468,059,738 | 1,783,341,001 | 903,115,828 | 2,483,511,733 | 100.0 | 100.0 | 25.7 |
| 2013[8] | 483,966,112 | 1,992,569,006 | 990,069,135 | 2,490,481,231 | 100.0 | 100.0 | 1.4 |

(1) Asset method change: The difference between expected and actual return on market value smoothed over 4 years.

(2) Cost method change: From Entry Age Normal to Projected Unit Credit.

(3) Assumption changes recommended in 2006 experience study were adopted, plus plan changes to all groups including implementation of DROP programs for general employees, correctional officers and deputy sheriffs.

(4) Amortization period was changed to 30 years.

(5) Actuarial Asset Method is revised to remove 14% Corridor Around Market Value and the smoothing period was changed from 4 to 5 years. Salary increase rates for all members were reduced.

(6) Actuarial Asset Method change: The Smoothing period was changed from 5 to 10 years.

(7) Interest rate decreased from 7.875% to 7.25%, which was offset by the net proceeds from the Pension Obligation Bonds. In addition, the System also implemented the Retirement Incentive Plan early retirement window.

(8) Interest rate decreased from 7.25% to 7.00% and assumption changes recommended in the 2011 experience study were adopted.

## Analysis of Change in Unfunded Accrued Liability
As of June 30, 2013

| *Reconciliation of Gain (Loss) in the Unfunded Accrued Liability:* | Amount |
|---|---|
| 1. Unfunded Accrued Liability at June 30, 2012 | $671,004,834 |
| 2. Interest Charge at 7.25% to June 30, 2013 | 48,647,850 |
| 3. Contributions Toward Unfunded Accrued Liability | 46,143,431 |
| 4. Re-amortization of Prior Payments from 7.875% to 7.250% | 2,859,328 |
| 5. Change in Interest Rate from 7.250% to 7.000% | 92,339,343 |
| 6. Change in Demographic and Salary Scale Assumptions | 106,054,297 |
| 7. Expected Unfunded Accrued Liability at June 30, 2013<br>(1) + (2)-(3)+(4) + (5)+(6) | 874,762,221 |
| 8. Actual Unfunded Accrued Liability at June 30, 2013 | 976,123,022 |
| 9. Increase (Decrease) from Expected / Actuarial Loss<br>(8) – (7) | $101,360,801 |

## Progress Toward Amortization of Unfunded Accrued Liability
For the Year Ended
June 30, 2013

| Unfunded Accrued Liability | Amount | Amortization Period |
|---|---|---|
| 1. 2008 Fresh Start Employer Base | $199,213,915 | 25 Years |
| 2. 2008 Actuarial Loss | 121,649,912 | 25 Years |
| 3. 2009 Actuarial Loss | 587,783,618 | 26 Years |
| 4. 2009 Asset Method Change / Remove Corridor & go to 5-Yr Smoothing | (364,725,669) | 26 Years |
| 5. 2009 Assumption Change / Salary Scale | (52,592,164) | 26 Years |
| 6. 2009 Plan Changes / Amendments | (5,114,292) | 26 Years |
| 7. 2010 Actuarial Loss | 194,546,627 | 27 Years |
| 8. 2010 Asset Method Change / Change to 10-Year Smoothing | (108,488,785) | 27 Years |
| 9. 2011 Actuarial Loss | 97,538,176 | 28 Years |
| 10. 2012 Actuarial Loss | 59,640,234 | 29 Years |
| 11. 2012 Plan Change / Retirement Incentive Program | 10,870,121 | 9 Years |
| 12. 2012 Assumption Change / Interest Rate offset by POB issue | (63,953,112) | 29 Years |
| 13. 2013 Actuarial Loss | 101,360,801 | 30 Years |
| 14. 2013 Assumption Change / Interest Rate, Demographics, and Sal. Scale | 198,393,640 | 30 Years |
| 15. Total | $671,004,834 | |

## Summary of Plan Provisions

The Employees' Retirement System provides members the following benefits:

- Retirement Benefits
- Disability Benefits
- Death Benefits

**ELIGIBILITY**

Full-time and part-time employees of Baltimore County and the Baltimore County Revenue Authority and employees of the Board of Education, Board of Library Trustees and the Community College of Baltimore County not eligible to participate in the Maryland State Retirement and Pension Systems are entitled to membership in the System. Employees, exclusive of firefighters and police officers, may become a System member at any time within the first two years of employment if hired prior to January 1, 2014, or sixty days if hired on or after January 1, 2014. System membership is compulsory for firefighters and police officers as a condition of employment. All other employees must become a System member at the end of the two-year period as a condition of employment if hired prior to January 1, 2014, or sixty days if hired on or after January 1, 2014, except for elected officials, employees appointed to certain non-merit positions and part-time employees that have the option to join the System. Selection of the option must be made within two years of employment if hired prior to January 1, 2014, or sixty days if hired on or after January 1, 2014. Waived time is not eligible for buy back. System members hired prior to July 1, 2007 are vested after five years of membership. System members hired on or after July 1, 2007 are vested after ten years of creditable service. The age of hire at which an employee may opt not to join the System was lowered from age 59 to 55 effective July 1, 2010.

Members are designated as elected officials, general employees, deputy sheriffs, correctional officers, firefighters or police officers. Elected officials include only the County Executive and County Council members. General employees include Baltimore County department heads, classified employees, and part-time employees (employees excluded from the classified service and work less than a standard full-time work schedule), Revenue Authority, education, library and community college employees. Firefighters and police officers include only the sworn personnel of the Fire Department and Police Department, respectively.

**MEMBER CONTRIBUTIONS**

System members contribute a percentage of their salary to the System. The contribution rate for members hired prior to July 1, 2007 is actuarially determined based on the member's age at enrollment and employee classification. The contribution rate for elected officials and members hired on or after July 1, 2007 is fixed.

Contribution rates range as follows:

| | Contribution Rate as a % of Covered Payroll | | | |
|---|---|---|---|---|
| Classification | Hired prior to July 1, 2007 (Range) | Hired on or after July 1, 2007 | Hired on or after July 1, 2011 | Hired on or after July 1, 2012 |
| Elected officials | 13.85% | 13.85% | 13.85% | 13.85% |
| Department Heads | 7.56 - 12.48 | 10.50 | 10.50 | 10.50 |
| General employees | 5.42 - 9.36 | 7.00 | 7.00 | 7.00 |
| Correctional Officers | 5.48 - 8.22 | 8.00 | 10.00 | 10.00 |
| Deputy Sheriffs | 5.67 - 9.36 | 8.00 | 10.00 | 10.00 |
| Firefighters | 7.96 - 9.71 | 8.50 | 10.00 | 10.00 |
| Police Officers | 7.98 - 10.22 | 8.50 | 8.50 | 8.50 |
| Police Supervisory, Mgmt. and Confidential (SMC) | 8.01 - 8.63 | 9.50 | 9.50 | 10.00* |

*Includes members who began service as Police SMC on or after July 1, 2012.

Interest is credited on member contributions at the rate of 5.0% per annum on the beginning of the fiscal year balance.

## Summary of Plan Provisions, continued

**MILITARY SERVICE CREDIT**

Members hired prior to July 1, 2007, with five years of creditable service, or members hired on or after July 1, 2007, with ten years of creditable service are entitled to a military service credit on a year-for-year basis for up to a maximum of four years.

**SICK LEAVE CREDIT**

At the time of retirement, all members, except firefighters receive one month of service credit for each 22 unused sick leave days. One additional month is granted if fractional days of sick leave total 11 or more. Firefighters receive one month of service credit for each 16 unused sick leave days. Sick leave may be used to determine service credit except for the following circumstances: death benefit, ordinary disability, and vesting.

Beginning January 1, 2013, Police SMC earned sick leave at the rate of 11 days per year instead of 15 days. Beginning January 1, 2015, Police SMC will earn 1 month of membership service for 16 days of unused sick leave instead of the current 22 days.

**RETIREMENT ALLOWANCE DATES**

**Normal Retirement for Service: Plan A (Members hired prior to July 1, 2007)**

Normal retirement for service can be granted to general employees and appointed officials who have reached the age of 60 with 5 years of creditable service or attained 30 years of creditable service. A normal retirement for service can be granted to elected officials who have attained 16 years of creditable service or age 55 and attained 4 years of creditable service. An early service retirement can be granted to general employees who have reached the age of 55 and have attained 20 years of creditable service. A normal retirement for service can be granted to correctional officers and deputy sheriffs who have reached the age of 60 with 5 years of creditable service or have attained 20 years of creditable service. A normal retirement for service can be granted to firefighters at the age of 60 with 5 years of creditable service or age 50 with 20 years of creditable service or 25 years creditable service regardless of age. A normal retirement for service can be granted to police officers who have reached the age of 55 or have attained 20 or more years of creditable service. The System does not have a mandatory retirement age requirement for general employees, deputy sheriffs and correctional officers. Firefighters and police officers must retire at age 65 unless approved for continuation of service by the Board on an annual basis.

**Normal Retirement for Service: Plan B (Members hired on or after July 1, 2007)**

Normal retirement for service can be granted to general employees and appointed officials who have reached the age of 67 with 10 years of creditable service or attained 35 years of creditable service regardless of age. A normal retirement for service can be granted to elected officials who have attained 16 years of creditable service or age 55 and attained 4 years of creditable service. A normal retirement for service can be granted to correctional officers and deputy sheriffs who have reached the age of 67 with 10 years of creditable service or have attained 25 years of creditable service regardless of age. A normal retirement for service can be granted to firefighters at the age of 60 with 10 years of creditable service or 30 years creditable service regardless of age. A normal retirement for service can be granted to police officers who have reached the age of 60 with 10 years of creditable service or have attained 25 years of creditable service regardless of age. The System does not have a mandatory retirement age requirement for general employees, deputy sheriffs and correctional officers. Firefighters and police officers must retire at age 65 unless approved for continuation of service by the Board on an annual basis.

**Ordinary Disability Retirement** may be granted to a member who can no longer perform their job due to a non-occupational related injury. A sworn police officer or firefighter, hired prior to July 1, 2007 must have five years of creditable service and be medically certified as incapacitated to continue performance of their duties. All other members must have 10 years of creditable service and be medically certified as incapacitated to continue performance of their duties.

## Summary of Plan Provisions, continued

**Accidental Disability Retirement** may be granted to a member upon application who has been physically incapacitated for duty as a result of an occupational related injury. Accidental disabilities for all members are now tiered based on the degree of disability (75%, 66.67%, or 50%) in lieu of 66.67% plus accumulated contributions.

**Discontinued Service Retirement** may be granted to a member whose employment has been discontinued through no fault of their own after completion of 25 years of creditable service or age 50 and 20 years of creditable service.

**RETIREMENT ALLOWANCES**

Retirement allowances are comprised of an annuity equal to the actuarial equivalent of the accumulated contributions plus a pension which together with the annuity shall provide a maximum allowance as provided for in the Code.

**Normal Retirement for Service Allowance** is granted as follows:

(A) General employees (excluding appointed officials and correctional officers and part-time employees) hired prior to July 1, 2007, with 30 years of creditable service, or age 65 with 5 years of creditable service receive an allowance equal to 1/55th of the Average Final Compensation (AFC) times the number of years of creditable service. General employees hired prior to July 1, 2007 may retire at age 60 with at least 5 years of creditable service, however, such members will be granted a blended benefit. For creditable service earned prior to July 1, 2007, members will receive an allowance equal to 1/55$^{th}$ of AFC times the number of years of creditable service and for creditable service earned on or after July 1, 2007, members will receive an allowance equal to 1/70$^{th}$ of AFC times the number of years of creditable service. The AFC definition is determined by the employee's classification as the highest 12 or 36 consecutive months.

General employees (excluding appointed officials and correctional officers) hired on or after July 1, 2007, receive an allowance equal to 1/70th of the Average Final Compensation (AFC) times the number of years of creditable service. The AFC definition for general employees hired on or after July 1, 2007, is the annual earnable compensation for the highest 36 consecutive months.

Part-time employees earn creditable service on a proportionate basis equal to the time worked annually as compared to the standard work year.

(B) Appointed officials receive an allowance equal to 2.5% of their AFC times the number of years of creditable service.

(C) Elected officials receive an allowance equal to 5.0% of their AFC times the number of years of creditable service. Any Council member who becomes a member of the retirement system on or after February 1, 2010 may not receive a retirement allowance in excess of 60% of the member’s AFC.

(D) Firefighters receive an allowance equal to 2.5% times the years of creditable service up to 20 years plus 2% of AFC for each year of creditable service in excess of 20 years, and 3% of AFC for each year of creditable service in excess of 30 years for years beginning on or after July 1, 2007. Firefighters with less than 20 years of creditable service receive an allowance equal to 2% of AFC times years of creditable service. The 3% rate does not apply to service earned prior to July 1, 2007. AFC is defined as the annual earnable compensation during the 12 consecutive calendar months affording the highest average.

(E) Police officers with 20 or more years of creditable service receive an allowance equal to 2.5% of AFC times years of creditable service up to 20 years plus 2% of AFC for each year of creditable service in excess of 20 years, and 3% of AFC for each year of creditable service in excess of 25 years for years beginning on or after July 1, 2007. The 3% rate does not apply to service earned prior to July 1, 2007. Police officers with less than 20 years of creditable service receive an allowance equal to 2% of AFC times years of creditable service. AFC is defined as the annual earnable compensation during the 12 consecutive calendar months affording the highest average.

## Summary of Plan Provisions, continued

(F) Correctional officers and deputy sheriffs with 20 or more years of creditable service receive an allowance equal to 2.5% of AFC times years of creditable service up to 20 years plus 2% of AFC for each year of creditable service in excess of 20 years. Correctional officers and deputy sheriffs hired prior to July 1, 2007, with less than 20 years of creditable service receive an allowance equal to general employees. Correctional officers and deputy sheriffs hired on or after July 1, 2007, with less than 20 years of creditable service receive an allowance equal to 1.43% of AFC times the number of years of creditable service.

**Ordinary Disability Retirement Allowance**

(A) General employees, correctional officers and deputy sheriffs hired prior to July 1, 2007, receive an ordinary disability retirement allowance equal to 1.82% of AFC times the number of years of creditable service. General employees, correctional officers and deputy sheriffs hired on or after July 1, 2007, receive a retirement allowance equal to 1.43% of AFC times the number of years of creditable service. The minimum allowance is equal to 25% of AFC. No member may receive a benefit in excess of that which they would have received at normal service retirement age. General employees, correctional officers and deputy sheriffs who are eligible for a normal service retirement and apply for an ordinary disability retirement may be required by the Board to accept a normal service retirement.

(B) Firefighters and police officers receive an ordinary disability retirement allowance equal to 2.5% of AFC times the number of years of creditable service not in excess of 20 years, and 2% of AFC times the number of years of creditable service in excess of 20 years. The minimum retirement allowance for Firefighters and police officers for an ordinary disability retirement allowance shall equal to 50% of AFC. No member may receive a benefit in excess of that which they would have received at normal service retirement age.

**RETIREMENT ALLOWANCE OPTIONS**

Members may select the maximum retirement allowance or one of seven optional survivorship allowances. The selection of an option, excluding *Option 7*, reduces the maximum allowance. The options are as follows:

*Option 1.* Allows the member's undistributed accumulated contributions to be paid to the beneficiary in a lump sum if the member's death occurs prior to a complete payout of all member contributions.

*Option 2.* Allows 100% of the member's retirement allowance to continue to be paid to the beneficiary after the member's death.

*Option 3.* Allows 50% of the member’s retirement allowance to continue to be paid to the beneficiary after the member’s death.

*Option 4.* Allows any portion of the retirement allowance to continue to be paid to the beneficiary after the member’s death.

*Option 5.* Allows 100% of the member's reduced retirement allowance to be paid to the beneficiary after the member's death. If the member becomes divorced from the beneficiary or the beneficiary dies before the retiree, upon notification to the Board of Trustees, the member's allowance will be increased to the maximum allowance described above. If after such death or divorce, the member wishes to select a new beneficiary and retirement option, the member may select *options 2, 3, 4, 5 or 6*. The retirement allowance will then be recomputed.

## Summary of Plan Provisions, continued

*Option 6.* Allows 50% of the member's reduced retirement allowance to be paid to the beneficiary after the member's death. If the member becomes divorced from the beneficiary or the beneficiary dies before the retiree, upon notification to the Board of Trustees, the member's allowance will be increased to the maximum allowance described above. If after such death or divorce, the member wishes to select a new beneficiary and retirement option, the member may select *options 2, 3, 4, 5 or 6*. The retirement allowance will then be recomputed.

*Option 7.* Allows 50% of the member's retirement allowance to continue to be paid to the original beneficiary at no cost to the employee. This option is available to employees who have completed at least 25 years of actual service as a sworn Baltimore County police officer or 25 years of actual service as a sworn Baltimore County Firefighter. If after such death or divorce, the member wishes to select a new beneficiary and retirement option, the member may select *options 2, 3, 4, 5 or 6*. The retirement allowance will then be recomputed.

### DEFERRED RETIREMENT OPTION PLAN (DROP)

#### Police Officers and Firefighters DROP

The County has adopted a Back DROP for police officers with at least 27 years of service and Firefighters with at least 32 years of service, under which eligible active members may elect to receive a lump sum payment at retirement in exchange for a reduced monthly benefit for life. Election to participate in the DROP will be made at retirement. The DROP participant benefit will be calculated along with all other available options, and the member will then choose between the DROP benefit and the regular pension benefits provided by the County. The DROP participant monthly pension will be determined as of a date that is three to five years prior to retirement date based on the plan provisions, the member's salary and service at that earlier date. The lump sum payment will be based on the accumulation of member contributions, monthly pension payments, interest earned in the DROP period and any retiree COLAs after at least twelve months in the DROP. This program became effective with retirements that occurred on or after July 1, 2004. Police officers and firefighters hired on or after July 1, 2007 are not eligible to participate in the DROP.

#### Correctional Officers and Deputy Sheriffs Deferred Retirement Option Plan (DROP)

Effective July 1, 2010, a Back-DROP is offered to eligible correctional officers and deputy sheriffs hired prior to July 1, 2007. The Back-DROP program allows eligible correctional officers and deputy sheriffs to elect to receive a lump sum payment at retirement in exchange for a reduced monthly benefit. The DROP period is from 3 to 5 years. Eligibility is based on 27 years of service. Correctional officers and deputy sheriffs hired on or after July 1, 2007 are not eligible to participate in the DROP.

#### General Employees Deferred Retirement Option Plan (DROP)

Effective July 1, 2007, General employees hired prior to July 1, 2007, are offered a Forward DROP. The DROP allows eligible general employees to elect to receive a lump sum payment at retirement in exchange for a reduced monthly benefit. The DROP period is a minimum of 5 years and a maximum of 10 years. Eligibility is age 55 plus a total of age and service of at least 85. The DROP account will include benefit payments at the maximum option, employee contributions, an interest credit of 5%, plus any cost of living increase granted to retirees, provided the member has been in the DROP for at least 12 months. This program is effective for retirements that occur on or after July 1, 2012. General employees hired on or after July 1, 2007 are not eligible to participate in the DROP.

## Summary of Plan Provisions, continued

**DEATH BENEFITS**

**Ordinary Death Benefit** is granted as a result of a member's death from non-occupational causes as follows:

(A) A general employee's designated beneficiary or estate receives a lump sum payment of the member's contributions plus interest. Additionally, after five year of creditable service, the member's designated beneficiary or estate may receive a one-time payment equal to 100% of the member's annual earnable compensation. If the member was eligible for a service retirement or had 15 years of creditable service at the time of death, the surviving spouse or surviving minor children, if designated as the beneficiary, may receive a retirement allowance, in lieu of other benefit payments, based on service years equivalent to *Option 2*.

(B) A firefighter's or police officer's designated beneficiary or estate receives a lump sum payment consisting of the member's accumulated contributions plus interest. Additionally, after one year of creditable service, the member's designated beneficiary or estate may receive a one-time payment equal to 100% of the member's annual earnable compensation. If the firefighter or police officer had two years of creditable service, a surviving dependent family member, if designated as the beneficiary, may receive an allowance equal to 25% of AFC in lieu of another benefit. If the firefighter or police officer had 15 years of creditable service or was eligible for a service retirement, the surviving spouse or surviving minor children, if designated as the beneficiary, may receive a retirement allowance in lieu of other benefit payments based on the service years equivalent to *Option 2*.

**Accidental Death Benefit** is granted as the result of death from an occupational related injury as follows:

(A) The dependent beneficiary of a general employee may receive an allowance equal to $66^2/_3$% of AFC plus the annuity.

(B) The dependent beneficiary of a firefighter or police officer may receive an allowance equal to 100% of the annual earnable compensation at the time of death plus the annuity.

**TERMINATION BENEFITS**

Employees hired prior to July 1, 2007, with 5 or more years of membership service have the option of requesting a refund of their contributions and interest or remain in the System. If such member terminates employment or dies in service, with less than 5 years creditable service, the employee contributions plus interest are refundable to the former member or a designated beneficiary.

Employees hired on or after July 1, 2007, with 10 or more years of creditable service have the option of requesting a refund of their contributions and interest or remain in the System. If such member terminates employment or dies in service, with less than 10 years creditable service, the employee contributions plus interest are refundable to the former member or a designated beneficiary.

**POST-RETIREMENT ALLOWANCE INCREASES**

Retirement allowance increases can be granted each July 1 if sufficient investment income has accumulated in the Post-Retirement Increase Fund balance account. Increases will be granted in an amount equal to the Consumer Price Index - All Urban Consumers (CPI-U) increase for the previous calendar year. The increase cannot exceed 3%. If there are insufficient funds in the Post-Retirement Increase Fund balance account to finance the full CPI increase, the allowance will be increased to the nearest ¼% for which there are sufficient moneys. If there are insufficient funds to finance a one percent increase, no retirement allowance increase shall be granted. Effective July 1, 2010 the following changes regarding COLAs were implemented:

## Summary of Plan Provisions, continued

- Active members hired prior to July 1, 2007 must have at least 20 years of creditable service to be eligible for post-retirement COLAs.
- Active members hired on or after July 1, 2007 must have at least twenty five (25) years of creditable service to be eligible for post- retirement COLAs.
- The cap on post-retirement COLAs has been reduced from 4% to 3% for all members.
- The maximum account balance in the PRIF has been reduced from 2 times the cost of a 4% COLA to 2 times the cost of a 3% COLA for all members.
- For active members who do not select the Deferred Retirement Option Program (DROP), the eligibility period to receive post-retirement COLAs has been increased from a minimum of 12 months to a minimum of 60 months.
- For active members who select the DROP program, the eligibility period to receive COLAs in the DROP remains a minimum of 12 months. Once the member actually retires, the eligibility period for a post-retirement COLA is a minimum of 48 months.

## Changes to Plan Provisions

LEGISLATIVE AND ADMINISTRATIVE CHANGES

*Reduction in Valuation Rate, Effective July 1, 2013*

The valuation interest rate was changed from 7.25% to 7.00% as of June 30, 2013. In addition, the salary scale assumption and several demographic assumptions were changed as a result of the July 1, 2006 –June 30, 2011 experience study (adopted by the Board at its January 2014 meeting).

*Contributions:*

On September 3, 2013 County Council passed Bill No. 46-13 that clarified the members and beneficiaries nonforfeitability clause to comply with Section 411 of the IRS Code.

On November 4, 2013, the County Council passed Bill No. 59-13 that provided a line of duty death benefit for children for up to five years after reaching age eighteen. The child must attend school on a full-time basis and the school offers an educational or vocational program accredited or approved by the State

On November 18, 2013, the County Council passed Bill No. 61-13 which requires full time classified employees (other than Police and Firefighters) to join the retirement system within 60 days of employment if hired on or after January 1, 2014. Selection of the option to join the System, may be made by part-time employees hired on or after January 1, 2014 within sixty days of employment or forfeit their right to become a member.

On April 21, 2014, the County Council passed Bill No. 25-14 which increased the rate of regular contribution for sworn members of the Police Department on pay schedule IV, hired on or after July 1, 2014 from 8% to 10% of earnable compensation, effective July 1, 2014.

# *STATISTICAL SECTION*

# STATISTICAL SECTION

The purpose of the Statistical Section is to provide historical perspective and detail to assist the reader to better understand and assess the System's overall economic condition. The data presented is intended to provide users with a broader and more complete understanding of the System than is possible from the information presented in the Financial Section alone.

The schedules within the Statistical Section are classified into the following categories.

*Financial Trends*

The schedules on Page 76 show financial trend information to help the reader understand how the System's financial position has changed over the last 10 years. The schedules presented are:

- Schedule of Changes in Fiduciary Net Position

- Schedule of Benefit and Refund Deductions from Fiduciary Net Position by Type

*Other Information*

The schedules beginning on Page 77 provide information to assist the reader to understand the retired member characteristics and the participating employer composition of the System. The schedules presented are:

- Retirees and Beneficiaries - Distribution to Members by Type of Retirement

- Retirees and Beneficiaries - Distribution to Members by Option Selected

- Schedule of Average Benefit Payments

- Schedule of Participating Employers

**Schedule of Changes in Fiduciary Net Position**
**For the Ten Years Ended June 30**
*(Expressed in thousands)*

| | ADDITIONS | | | | DEDUCTIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Fiscal Year | Member Contributions | Employer Contributions | Investment Income (Loss) | Total Additions to Fiduciary Net Position | Benefit Payments | Refunds of Contribution | Administrative Expenses | Total Deductions from Fiduciary Net Position | Changes in Net Position |
| 2005 | $23,880 | $29,968 | $163,170 | $217,018 | $118,663 | $2,625 | $ 907 | $122,195 | $94,823 |
| 2006 | 26,173 | 34,433 | 167,538 | 228,144 | 125,253 | 2,674 | 1,037 | 128,964 | 99,180 |
| 2007 | 27,773 | 40,065 | 331,810 | 399,648 | 139,357 | 3,263 | 1,066 | 143,686 | 255,962 |
| 2008 | 29,962 | 44,168 | (124,713) | (50,583) | 134,991 | 2,949 | 1,009 | 138,949 | (189,532) |
| 2009 | 31,423 | 49,763 | (396,596) | (315,410) | 147,062 | 3,400 | 947 | 151,409 | (466,819) |
| 2010 | 33,236 | 57,976 | 254,805 | 346,017 | 150,704 | 2,235 | 1,099 | 154,038 | 191,979 |
| 2011 | 36,567 | 58,340 | 372,715 | 467,622 | 164,655 | 2,726 | 2,541 | 169,922 | 297,700 |
| 2012 | 39,481 | 65,127 | 23,321 | 127,929 | 209,673 | 3,640 | 2,329 | 215,642 | (87,713) |
| 2013 | 37,682 | 328,362 | 198,892 | 564,936 | 232,410 | 3,110 | 2,294 | 237,814 | 327,122 |
| 2014 | 37,844 | 80,454 | 327,264 | 445,562 | 225,668 | 3,166 | 1,342 | 230,176 | 215,386 |

**Schedule of Benefit and Refund Deductions from Fiduciary Net Position by Type**
**For the Ten Years Ended June 30**
*(Expressed in Thousands)*

| | | | Disability Benefits | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Age & Service Benefits | | Retirees | | | | | Refunds | | |
| Year Ending June 30 | Retirees | Beneficiaries | Occupational | Non-Occupational | Beneficiaries | Death Benefits | Total Benefits | Separation | Death* | Total Refunds |
| 2005 | $92,473 | $5,357 | $15,397 | $4,831 | $320 | $285 | $118,663 | $2,577 | - | $2,577 |
| 2006 | 97,912 | 5,751 | 15,879 | 4,978 | 377 | 356 | 125,253 | 2,579 | - | 2,579 |
| 2007 | 111,831 | 6,030 | 15,800 | 5,035 | 457 | 204 | 139,357 | 3,020 | $ 243 | 3,263 |
| 2008 | 106,383 | 6,420 | 16,087 | 5,309 | 501 | 291 | 134,991 | 2,678 | 271 | 2,949 |
| 2009 | 116,697 | 7,102 | 16,922 | 5,584 | 480 | 277 | 147,062 | 2,998 | 402 | 3,400 |
| 2010 | 120,063 | 7,395 | 16,857 | 5,625 | 579 | 185 | 150,704 | 2,043 | 192 | 2,235 |
| 2011 | 132,008 | 8,561 | 17,077 | 5,870 | 634 | 505 | 164,655 | 1,892 | 834 | 2,726 |
| 2012 | 177,075 | 8,823 | 16,933 | 5,821 | 691 | 330 | 209,673 | 3,030 | 610 | 3,640 |
| 2013 | 199,754 | 9,130 | 16,671 | 5,824 | 709 | 292 | 232,410 | 2,823 | 287 | 3,110 |
| 2014 | 195,613 | 4,820 | 16,453 | 5,881 | 765 | 2,136 | 225,668 | 2,861 | 305 | 3,166 |

*Data to allocate refunds by type (i.e. death) were not available prior to FY2007. Refunds due to death were included in refund-separation prior to FY07.

## Retirees and Beneficiaries - Distribution of Members by Type of Retirement

Fiscal Year Ended June 30, 2013

| Amount of Monthly Benefit | Number of Retirees | Type of Retirement | | | | | Deferred Future Benefits |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | |
| Deferred | 399 | - | - | - | - | - | 399 |
| $1 - $300 | 491 | 389 | 94 | - | 8 | - | - |
| $301 - $600 | 803 | 605 | 139 | - | 56 | 3 | - |
| $601 - $900 | 733 | 514 | 105 | 1 | 111 | 2 | - |
| $901 - $1,200 | 587 | 444 | 65 | 8 | 65 | 5 | - |
| $1,201 - $1,500 | 528 | 357 | 69 | 35 | 45 | 22 | - |
| $1,501 - $1,800 | 515 | 348 | 47 | 37 | 44 | 39 | - |
| $1,801 - $2,100 | 502 | 336 | 30 | 32 | 54 | 50 | - |
| $2,101 - $2,400 | 509 | 362 | 21 | 18 | 32 | 76 | - |
| $2,401 - $2,700 | 475 | 328 | 18 | 33 | 19 | 77 | - |
| $2,701 - $3,000 | 392 | 285 | 10 | 18 | 11 | 68 | - |
| Over $3,000 | 1,847 | 1,575 | 41 | 42 | 30 | 159 | - |
| Totals | 7,781 | 5,543 | 639 | 224 | 475 | 501 | 399 |

**Type of Retirement:**

1 = Normal retirement for age and/or service
2 = Survivor payment - normal, early or disability retirement
3 = Discontinued service retirement
4 = Ordinary disability retirement
5 = Accidental disability retirement

Deferred future benefits - Terminated employees entitled to benefits but not yet receiving them.

## Retirees and Beneficiaries - Distribution to Members by Option Selected

Fiscal Year Ended June 30, 2013

| Amount of Monthly Benefit | Number of Retirees | Option Selected | | | | | | | | Deferred Future Benefits |
|---|---|---|---|---|---|---|---|---|---|---|
| | | M | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Deferred | 399 | - | - | - | - | - | - | - | - | 399 |
| $1 - $300 | 491 | 255 | 160 | 20 | 7 | - | 36 | 13 | - | - |
| $301 - $600 | 803 | 372 | 286 | 33 | 17 | - | 48 | 47 | - | - |
| $601 - $900 | 733 | 345 | 252 | 19 | 30 | - | 35 | 52 | - | - |
| $901 - $1,200 | 587 | 245 | 203 | 23 | 21 | 3 | 39 | 53 | - | - |
| $1,201 - $1,500 | 528 | 226 | 150 | 19 | 30 | 3 | 40 | 60 | - | - |
| $1,501 - $1,800 | 515 | 231 | 134 | 16 | 29 | 10 | 39 | 56 | - | - |
| $1,801 - $2,100 | 502 | 213 | 133 | 26 | 21 | 8 | 43 | 57 | 1 | - |
| $2,101 - $2,400 | 509 | 217 | 122 | 23 | 20 | 17 | 48 | 61 | 1 | - |
| $2,401 - $2,700 | 475 | 224 | 96 | 18 | 17 | 22 | 37 | 61 | - | - |
| $2,701 - $3,000 | 392 | 182 | 73 | 8 | 12 | 24 | 31 | 62 | - | - |
| Over $3,000 | 1,847 | 560 | 275 | 42 | 50 | 152 | 58 | 167 | 543 | - |
| Totals | 7,781 | 3,070 | 1,884 | 247 | 254 | 239 | 454 | 689 | 545 | 399 |

### Option Selected:

M = Maximum. At member's death, all payments cease. Surviving beneficiary will receive pro-rated payment for number of days in final month.

*Option 1.* Guarantees the return of the member's accumulated contributions and interest less the member's accumulated reserves already paid.

*Option 2.* Guarantees 100% of the member’s payment to the designated beneficiary for their lifetime.

*Option 3.* Guarantees 50% of the member’s payment to the designated beneficiary for their lifetime.

*Option 4.* Guarantees an alternative specified % of the member’s payment to the designated beneficiary for their lifetime.

*Option 5.* Guarantees 100% payment to beneficiary, unless beneficiary divorces or predeceases member. Allowance then pops-up to maximum.

*Option 6.* Guarantees 50% payment to beneficiary, unless beneficiary divorces or predeceases member. Allowance then pops-up to maximum.

*Option 7.* Guarantees 50% of the member's payment to the designated beneficiary for their lifetime, at no cost. (*Option 7* is applicable to police and firefighters only with 25 years of creditable service). Allowed to change beneficiary if beneficiary divorces or predeceases member.

Deferred future benefits - Terminated employees entitled to benefits but not yet receiving them.

## Schedule of Average Benefit Payments
### For the Six Years Ended June 30

| | Years Creditable Service | | | | | |
|---|---|---|---|---|---|---|
| Retirement Effective Dates | 0-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30+ |
| July 1, 2008 to June 30, 2009 | | | | | | |
| Average Monthly Benefit | $703 | $969 | $1,537 | $2,107 | $3,609 | $4,160 |
| Average - Average Final Compensation | $36,062 | $43,864 | $49,797 | $58,813 | $72,423 | $74,099 |
| Number of Active Retirees | 26 | 29 | 20 | 51 | 41 | 89 |
| July 1, 2009 to June 30, 2010 | | | | | | |
| Average Monthly Benefit | $471 | $832 | $1,497 | $1,977 | $3,530 | $3,982 |
| Average - Average Final Compensation | $34,090 | $43,041 | $55,274 | $56,968 | $72,755 | $70,323 |
| Number of Active Retirees | 37 | 24 | 27 | 47 | 43 | 85 |
| July 1, 2010 to June 30, 2011 | | | | | | |
| Average Monthly Benefit | $452 | $833 | $1,369 | $2,093 | $3,679 | $4,153 |
| Average - Average Final Compensation | $42,818 | $42,066 | $49,118 | $57,874 | $75,447 | $75,539 |
| Number of Active Retirees | 41 | 33 | 29 | 47 | 55 | 123 |
| July 1, 2011 to June 30, 2012 | | | | | | |
| Average Monthly Benefit | $519 | $920 | $1,300 | $1,946 | $3,245 | $5,072 |
| Average - Average Final Compensation | $38,855 | $46,509 | $47,427 | $56,824 | $72,136 | $83,666 |
| Number of Active Retirees | 51 | 36 | 31 | 53 | 147 | 285 |
| July 1, 2012 to June 30, 2013 | | | | | | |
| Average Monthly Benefit | $477 | $814 | $1,318 | $1,807 | $3,831 | $4,846 |
| Average - Average Final Compensation | $40,180 | $42,360 | $49,074 | $55,647 | $78,608 | $88,317 |
| Number of Active Retirees | 39 | 49 | 29 | 29 | 68 | 130 |
| July 1, 2013 to June 30, 2014 | | | | | | |
| Average Monthly Benefit | $414 | $726 | $1,051 | $2,569 | $4,049 | $4,471 |
| Average - Average Final Compensation | $40,648 | $42,058 | $43,627 | $66,524 | $81,617 | $81,261 |
| Number of Active Retirees | 20 | 46 | 27 | 40 | 74 | 75 |

**Schedule of Participating Employers**
**Current Year and Nine Years ago**

| Participating Government Employers | FY 2013 Covered Employees | FY 2013 Rank | FY 2013 Percentage of Total System | FY 2004 Covered Employees | FY 2004 Rank | FY 2004 Percentage of Total System |
|---|---|---|---|---|---|---|
| Baltimore County, Maryland | 6,564 | 1 | 72.14% | 6,764 | 1 | 72.58% |
| Certain employees of: | | | | | | |
| Board of Education | 2,293 | 2 | 25.20% | 2,290 | 2 | 24.57% |
| Community College | 153 | 3 | 1.68% | 164 | 3 | 1.76% |
| Revenue Authority | 53 | 4 | 0.58% | 71 | 4 | 0.76% |
| Board of Library Trustees | 36 | 5 | 0.40% | 31 | 5 | 0.33% |
| Total | 9,099 | | 100.00% | 9,320 | | 100.00% |