

Employees' Retirement System of Baltimore County, Maryland

# **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

A Pension Trust Fund of Baltimore County

**For the Fiscal Year Ended June 30, 2010**



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

**JULY 1, 2009 TO JUNE 30, 2010**

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

Prepared By:  
Office of Budget and Finance

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***INTRODUCTORY  
SECTION***

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, 2009

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



President

Executive Director

# — INTRODUCTORY SECTION —

## EMPLOYEES' RETIREMENT SYSTEM OF BALTIMORE COUNTY



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### Letter of Transmittal

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

December 20, 2010

The Comprehensive Annual Financial Report of the Employees' Retirement System of Baltimore County, Maryland (the "System") for the year ended June 30, 2010, 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 plan net assets and changes in plan net assets 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. Immediate membership is mandatory for police officers and firefighters as a condition of employment. Membership is optional for part-time employees.

**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. Occupational death benefits are provided upon membership for any member whose death results from an injury occurring in the actual performance of their job. After one year of creditable service, members are covered for ordinary death benefits.

# — INTRODUCTORY SECTION —

## **Letter of Transmittal, continued**

Post-Retirement Cost of Living Adjustments (COLAs) are granted annually to members who have been retired for more than 12 months provided sufficient excess investment earnings exist. Certain changes to the plan, effective July 1, 2010, are summarized on page 65 in the Actuarial Section of this report.

The System's staff provides benefit counseling to benefit applicants throughout the year. Additionally, the staff makes benefit presentations at new employee orientations.

### **INVESTMENT PERFORMANCE**

The System investment portfolio gained 16.4% in FY 2010, recovering from the 17.5% loss incurred in FY 2009. With the exception of the real estate portfolio incurring a loss of 8.2%, all other investments categories in the System's portfolio had positive returns. Fixed income led the way with gains of 19.3%, followed closely by the domestic equity portfolio with gains of 17.3% and international equity with gains of 16.1%.

### **FUNDING STATUS**

For actuarial valuation purposes, returns are smoothed over a five-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. The funded status for FY 2009 and FY 2008 was 82.5%, and 88.0%, respectively, based on the latest available actuarial reports. The decrease is primarily due to the loss on the actuarial accrued liability, the loss on the asset experience.

### **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 2010, the Board allocated 5% of the portfolio to the Real Asset Class, while reducing the allocation to Large Cap US Equities by 4% and Domestic Fixed Income by 1%. The Board terminated one domestic equity manager and one international equity manager. Six new managers were hired by the Board, consisting of one international equity manager, two fixed income managers, two real asset managers and one private equity manager. The Board implemented these changes to better meet the System's long-term risk and return objectives.

### **MAJOR ISSUES AND INITIATIVES**

The Government Accounting Standards Board (GASB) has established new financial reporting standards through Statement No. 53, "Accounting and Financial Reporting for Derivative Instruments". The System has implemented the new financial reporting standards in its June 30, 2010 financial statements.

### **LEGISLATIVE AND ADMINISTRATIVE CHANGES:**

Effective February 1, 2010, County Council Bill 94-09 was enacted which caps retirement allowances for newly elected County council members at 60% of Average Final Compensation.

Changes taking effect in FY 2010 include:

- Eligibility for Ordinary Disability benefits increased from 5 years to 10 years for general, correctional officers and deputy sheriffs per Section 5-1-221 of the Code.
- Effective April 19, 2010, general, correction officers and deputy sheriffs who are eligible for a normal service retirement and applied for an ordinary disability retirement may be required by the Board to accept a normal service retirement.

# — INTRODUCTORY SECTION —

## Letter of Transmittal, continued

The County Council approved Legislative and Administrative changes to the System to take effect July 1, 2010, in the following areas:

- Contribution Rate Increase
- Post-Retirement Cost-of-Living Adjustments (COLAs)
- Disabilities and Death Benefits
- Administrative Efficiencies / Creditable Service

These changes were negotiated with the unions to protect the viability of the System. A summary of these changes may be found in the Actuarial Section of this report on Page 65.

## 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 assure adherence to guidelines and the achievement of objectives.

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. 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, 2010, the System portfolio rate of return was 16.4%. The System had an annualized loss of 2.9% over the past three years, and an annualized rate of return of 3.3% 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.

# — INTRODUCTORY SECTION —

## Letter of Transmittal, continued

**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 payroll. 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 to the payment of current and future member benefits. The County's commitment to provide a financially sound retirement plan for its members is illustrated on two 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 7 through 9.

**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, 2009. This was the sixteenth 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.

### 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

# — INTRODUCTORY SECTION —

## Board of Trustees

Fred Homan  
County Administrative Officer

County Executive Designee

Keith Dorsey  
Director of Budget and Finance

Ex-officio Trustee

Joseph H. Zerhusen, Chairman  
Retiree

Elected by retired membership  
Four-year term expires November 30, 2012

Theresa Stokes Hill  
Director of Human Resources

Ex-officio Trustee

James W. Johnson  
Chief of Police

Ex-officio Trustee

Edward C. Adams, Jr.  
Director of Public Works

Ex-officio Trustee

Cole B. Weston  
President, F.O.P. Lodge # 4

Elected by active membership  
Four-year term expires November 30, 2012

Michael K. Day  
President, IAFF Local 1311

Elected by active membership  
Four-year term expires November 30, 2012

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

# — INTRODUCTORY SECTION —

## Consultants and Professional Services

### Actuary

Buck Consultants  
Chicago, Illinois

### Auditors

Clifton Gunderson, LLP  
Baltimore, Maryland

Pension Investment Consultant  
New England Pension Consultants  
Cambridge, Massachusetts

EDP Consultant  
Levi, Ray & Shoup, Inc.  
Springfield, Illinois

Asset Custodian  
BNY Mellon  
Pittsburgh, Pennsylvania

Medical Board  
Rubin Reider, M.D.  
Rafael Hernandez, 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

Gottex Fund Management  
Boston, Massachusetts

Brown Capital Management  
Baltimore, Maryland

Earnest Partners  
Atlanta, Georgia

Cadence Capital Management  
Boston, Massachusetts

Benchmark Plus Mgmt.  
Tacoma, Washington

John Hsu Capital Group  
New York, New York

Profit Investment Mgmt.  
Silver Spring, Maryland

Herndon Capital Management  
Atlanta, Georgia

### International Equity

Gryphon International Investment Corp.  
Toronto Ontario, Canada

LSV Asset Management  
Chicago, Illinois

BlackRock  
San Francisco, California

Mondrian Investment Partners  
Wilmington, Delaware

# — INTRODUCTORY SECTION —

## Investment Managers, continued

### Fixed Income

Pacific Investment Mgmt. 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

### 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

TCW/Crescent Mezzanine Partners  
Los Angeles, California

Paul Capital Partners  
San Francisco, California

Landmark Equity Partners  
Simsbury, Connecticut

### Real Estate

ING Clarion  
New York, New York

Transwestern Investment Co.  
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

# — INTRODUCTORY SECTION —

## Investment Managers, continued

### Global Asset Allocation

Bridgewater  
Westport, Connecticut

Mellon Capital Mgmt.  
San Francisco, California

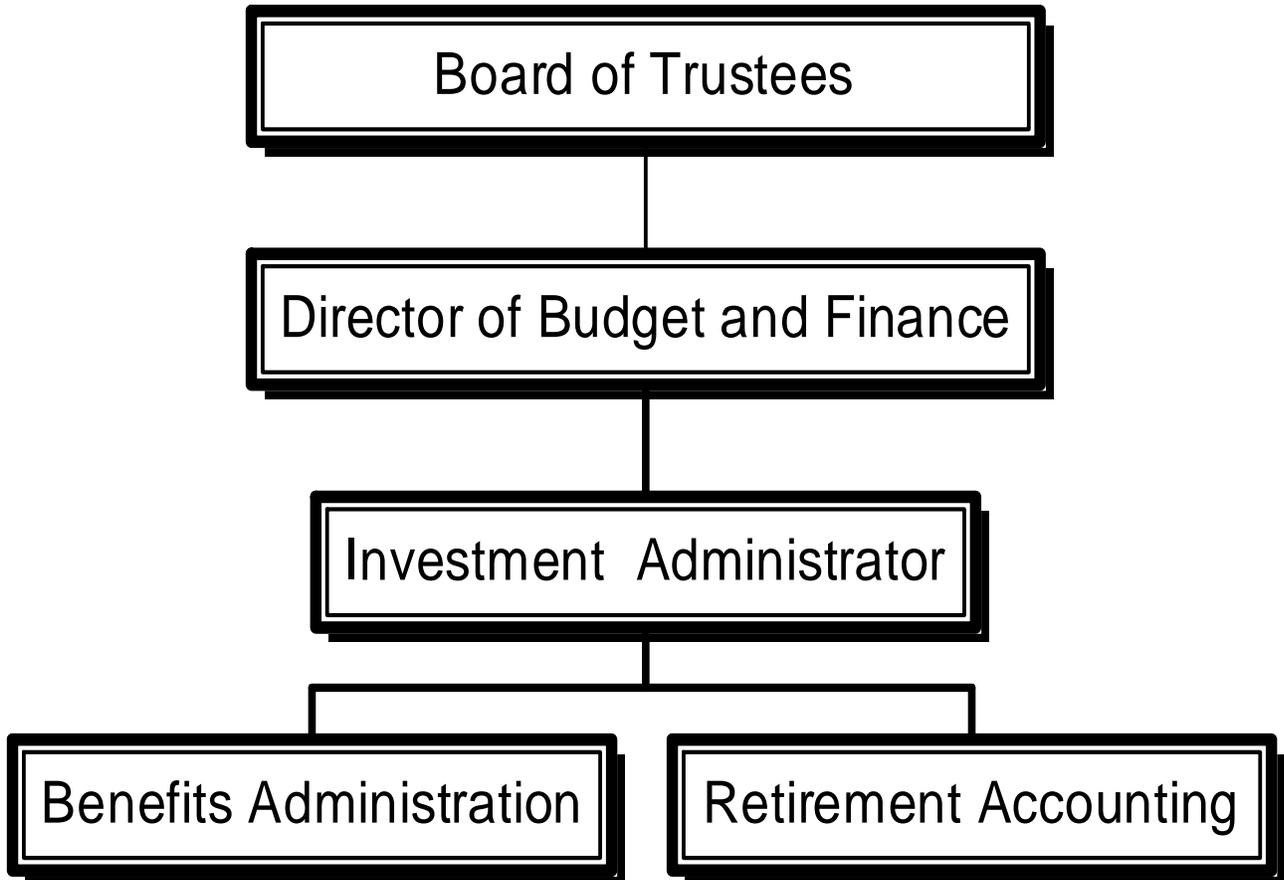
Wellington Trust Company, NA  
Boston, Massachusetts

### Real Assets

Gresham Investment Management  
New York, New York

Wellington Trust Company, NA  
Boston, Massachusetts

## Administrative Organizational Chart



***FINANCIAL  
SECTION***

# FINANCIAL SECTION

## INDEPENDENT AUDITOR'S REPORT



### Independent Auditor's Report

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

We have audited the accompanying Statement of Plan Net Assets and Statement of Changes in Plan Net Assets of the Employees' Retirement System of Baltimore County, Maryland (the System), as of and for the years ended June 30, 2010 and 2009, as listed in the table of contents. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion 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 of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Employees' Retirement System of Baltimore County, Maryland as of June 30, 2010 and 2009, and the changes in plan net assets for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated December 17, 2010 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and 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 the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis and Supplemental Schedules of Funding Progress and Required Employer Contributions, as listed in the table of contents are not a required part of the basic financial statements but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.



# — FINANCIAL SECTION —

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The Introductory, Investment, Actuarial and Statistical sections, and the schedules of investment expenses and administrative expenses, 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 expenses and administrative expenses have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole. The Introductory, Investment, Actuarial and Statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

*Clifton Henderson LLP*

Baltimore, Maryland  
December 17, 2010

# FINANCIAL SECTION

## 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, 2010 (FY 2010) and June 30, 2009 (FY 2009). 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

- System net assets held in trust at the close of FY 2010 and FY 2009 were \$1.79 billion and \$1.59 billion, respectively.
- 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, 2009 and 2008, the funded ratio was 82.5% and 88.0%, respectively.
- Contributions for FY 2010 and FY 2009 were \$91.2 and 81.2 million, respectively, an increase of 12.3%. This increase was primarily a result of increased employer contributions.
- Net investment income gain of \$254.8 million in FY 2010 compares favorably to the (\$397) million loss experienced in FY 2009.
- Total deductions increased slightly by 1.7% over the prior year from \$151 million to \$154 million.

### THE STATEMENT OF PLAN NET ASSETS AND THE STATEMENT OF CHANGES IN PLAN NET ASSETS

This Comprehensive Annual Financial Report (CAFR) consists of two financial statements: The Statement of Plan Net Assets (Page 19) and the Statement of Changes in Plan Net Assets (Page 20). 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 Plan Net Assets presents all of the System's assets and liabilities, with the difference between the two reported as net assets. Over time, increases and decreases in net assets measure whether the System's assets available for benefits is improving or deteriorating. The Statement of Changes in Plan Net Assets presents how the System's net assets changed during the most recent fiscal year. These two financial statements should be reviewed along with the Schedule of Funding Progress and Schedule of Employers' Contributions to determine whether the System is becoming financially stronger or weaker and to understand changes over time in the funded status of the System.

### 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 2010, net asset held in trust for pension benefits increased 12% over FY 2009, indicating an improving financial position of the System.

Total liabilities that are due and payable as of June 30, 2010 and 2009 were \$139,363,427 and \$155,791,329 respectively, and were comprised of payables for investment purchases, investment expenses, and obligations under securities lending. In FY 2010 total liabilities decreased 10.5% or \$16,427,902 from the prior year primarily due to a decrease in payables for collateral of loaned securities. In FY 2009 total liabilities decreased 63.3% or \$268,232,464 from the prior year primarily due to a decrease in both payables for collateral of loaned securities and investments purchased.

# FINANCIAL SECTION

## MANAGEMENT'S DISCUSSION AND ANALYSIS, CONTINUED

System assets exceeded its due and payable liabilities at the close of fiscal year 2010 and 2009 by \$1,786,270,975 and \$1,594,291,830, respectively. In FY 2010 total net assets held in trust for pension benefits increased 12% or \$191,979,145 from the previous year. In FY 2009, total net assets held in trust for pension benefits decreased 22.6% or \$466,819,395 from the previous year primarily due to the housing crisis and the extreme turmoil and volatility in the credit and equity markets.

### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM PLAN NET ASSETS AS OF JUNE 30, 2010, 2009 AND 2008 (IN THOUSANDS)

|   | 2010               | 2009               | 2008               | 2010-2009<br>Total %<br>Change | 2009-2008<br>Total %<br>Change |
|---|--------------------|--------------------|--------------------|--------------------------------|--------------------------------|
| <b>ASSETS</b>                                     |                    |                    |                    |                                |                                |
| Cash and Short Term Investments                   | \$41,851           | \$35,623           | \$88,274           | 17.5%                          | (59.6)%                        |
| Collateral for Loaned Securities                  | 89,734             | 126,205            | 246,762            | (28.9)                         | (48.9)                         |
| Receivables                                       | 29,339             | 16,234             | 76,756             | 80.7                           | (78.8)                         |
| Investments                                       | 1,764,711          | 1,572,021          | 2,073,343          | 12.3                           | (24.2)                         |
| <b>Total Assets</b>                               | <b>\$1,925,635</b> | <b>\$1,750,083</b> | <b>\$2,485,135</b> | <b>10.0%</b>                   | <b>(29.6)%</b>                 |
| <b>LIABILITIES</b>                                |                    |                    |                    |                                |                                |
| Accounts Payable and<br>Other Accrued Liabilities | 47,915             | 29,586             | 177,262            | 62.0                           | (83.3)                         |
| Obligations Under Securities Lending              | 91,449             | 126,205            | 246,762            | (27.5)                         | (48.9)                         |
| <b>Total Liabilities</b>                          | <b>\$139,364</b>   | <b>\$155,791</b>   | <b>\$424,024</b>   | <b>(10.5)%</b>                 | <b>(63.3)%</b>                 |
| <b>Total Net Assets</b>                           | <b>\$1,786,271</b> | <b>\$1,594,292</b> | <b>\$2,061,111</b> | <b>12.0%</b>                   | <b>(22.6)%</b>                 |

# FINANCIAL SECTION

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

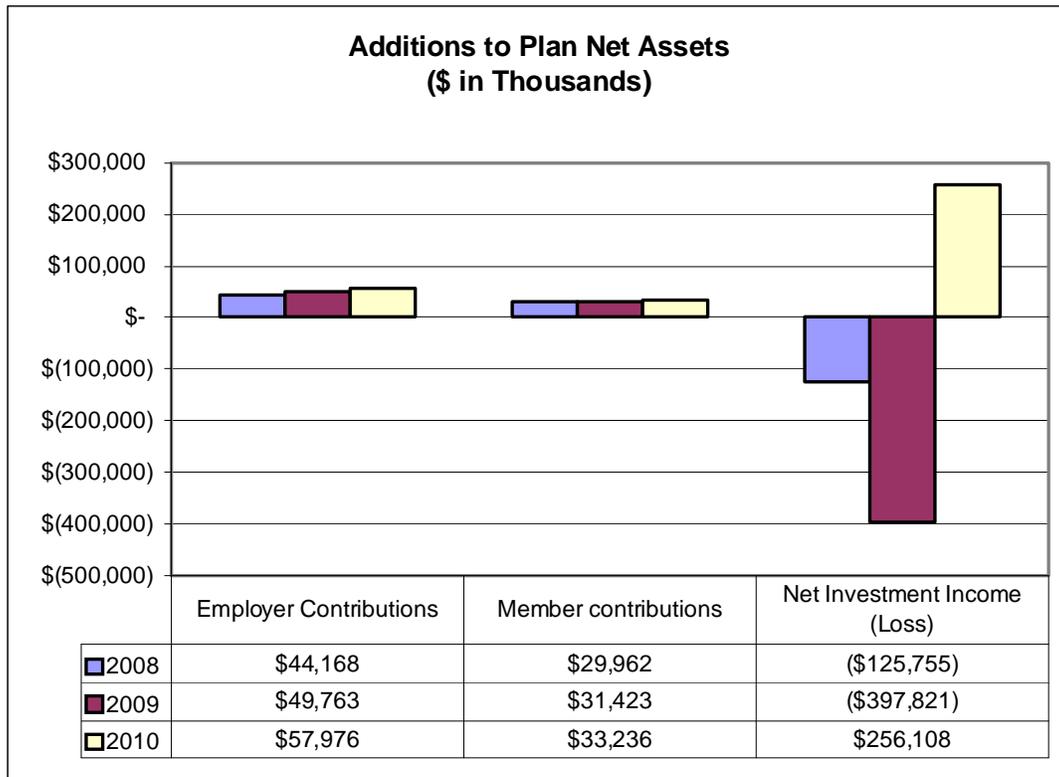
Total additions for FY 2010 increased 209.7% over FY 2009, due primarily to an increase in investment income. Total additions for FY 2009 decreased 523.5% over FY 2008, due primarily to a decrease in investment income resulting from the financial crisis and recession of the US economy. Total deductions for FY 2010 increased slightly by 1.7% or \$2,628,809 over FY 2009 due to an increase in benefit payments and administrative expenses. Total deductions for FY 2009 increased 9% or \$12,460,295 over FY 2008 due to an increase in benefit payments and refunds of contributions.

### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM CHANGES IN PLAN NET ASSETS FOR THE FISCAL YEARS ENDED JUNE 30, 2010, 2009 AND 2008 (IN THOUSANDS)

|  | <u>2010</u>        | <u>2009</u>        | <u>2008</u>        | <u>2010-2009<br/>Total %<br/>Change</u> | <u>2009-2008<br/>Total %<br/>Change</u> |
|--|--------------------|--------------------|--------------------|---|---|
| <b>ADDITIONS</b>                                 |                    |                    |                    |   |   |
| Contributions                                    | \$91,212           | \$81,186           | \$74,130           | 12.3%                                   | 9.5%                                    |
| Investment Income                                | 256,108            | (397,821)          | (125,755)          | 164.4                                   | (216.3)                                 |
| Net Income (Loss) from Security Lending          | (1,303)            | 1,225              | 1,042              | (206.4)                                 | 17.6                                    |
| Total Net Investment Income (Loss)               | <u>\$254,805</u>   | <u>(\$396,596)</u> | <u>(\$124,713)</u> | 164.2%                                  | (218.0)%                                |
| <b>Total Additions</b>                           | <u>\$346,017</u>   | <u>(\$315,410)</u> | <u>(\$50,583)</u>  | 209.7%                                  | (523.5)%                                |
| <b>DEDUCTIONS</b>                                |                    |                    |                    |   |   |
| Benefits   | 150,704            | 147,062            | 134,991            | 2.5                                     | 8.9                                     |
| Refunds of Contributions                         | 2,235              | 3,400              | 2,949              | (34.3)                                  | 15.3                                    |
| Administrative Expenses                          | 1,099              | 947                | 1,009              | 16.1                                    | (6.1)                                   |
| <b>Total Deductions</b>                          | <u>\$154,038</u>   | <u>\$151,409</u>   | <u>\$138,949</u>   | 1.7%                                    | 9.0%                                    |
| <b>Net Increase (Decrease)</b>                   | \$191,979          | (\$466,819)        | (\$189,532)        | 141.1%                                  | (146.3)%                                |
| Net Assets Held in Trust<br>for Pension Benefits |                    |                    |                    |   |   |
| Beginning of Year                                | 1,594,292          | 2,061,111          | 2,250,643          | (22.6)                                  | (8.4)                                   |
| End of Year                                      | <u>\$1,786,271</u> | <u>\$1,594,292</u> | <u>\$2,061,111</u> | 12.0%                                   | (22.6)%                                 |

# FINANCIAL SECTION

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)



### REVENUES – ADDITIONS TO PLAN NET ASSETS

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 (loss) for fiscal years 2010 and 2009 were \$346,017,153 and (\$315,410,196), respectively.

Additions increased for FY 2010 by \$661,427,349 from that of the prior year, due primarily to an increase in investment income. Additions decreased for FY 2009 by \$264,827,120 from that of the prior year, due primarily to a decrease in the investment income. Total employer contributions for FY 2010 increased over FY 2009 by \$8,213,524 or 16.5%, while member contributions increased by \$1,812,901 or 5.8%. Total employer contributions for FY 2009 increased over FY 2008 by \$5,595,329 or 12.7%, while member contributions increased by \$1,460,687 or 4.9%. The increase in employer contributions was primarily due to asset experience and other factors including an increase in scheduled accrued liability contributions. Based on the latest available actuarial valuation, the fiscal years ended 2009 and 2008, rates of return were (14.1%) and 7.5%, respectively.

The overall System portfolio returned 16.4% for FY 2010, which compares favorably to the 17.5% loss sustained in FY 2009. Except for real estate investments incurring a loss of 8.2%, all other asset categories provided substantial gains with Fixed Income leading the way with 19.3%, US Common Stock 17.3%, and international equity returning 16.1%.

For fiscal year ended June 30, 2009, the total portfolio had losses of 17.5%, which under-performed the System's performance benchmark of (14.4%). The leading under-performers for FY2009 were real estate investments with losses of 37.0%, U.S. equity and foreign equity investments with losses of 26.8% and 26.0% respectively, and private equity investments with losses of 16.8%. Fixed income investments provided the only positive returns of 3.2% to the System.

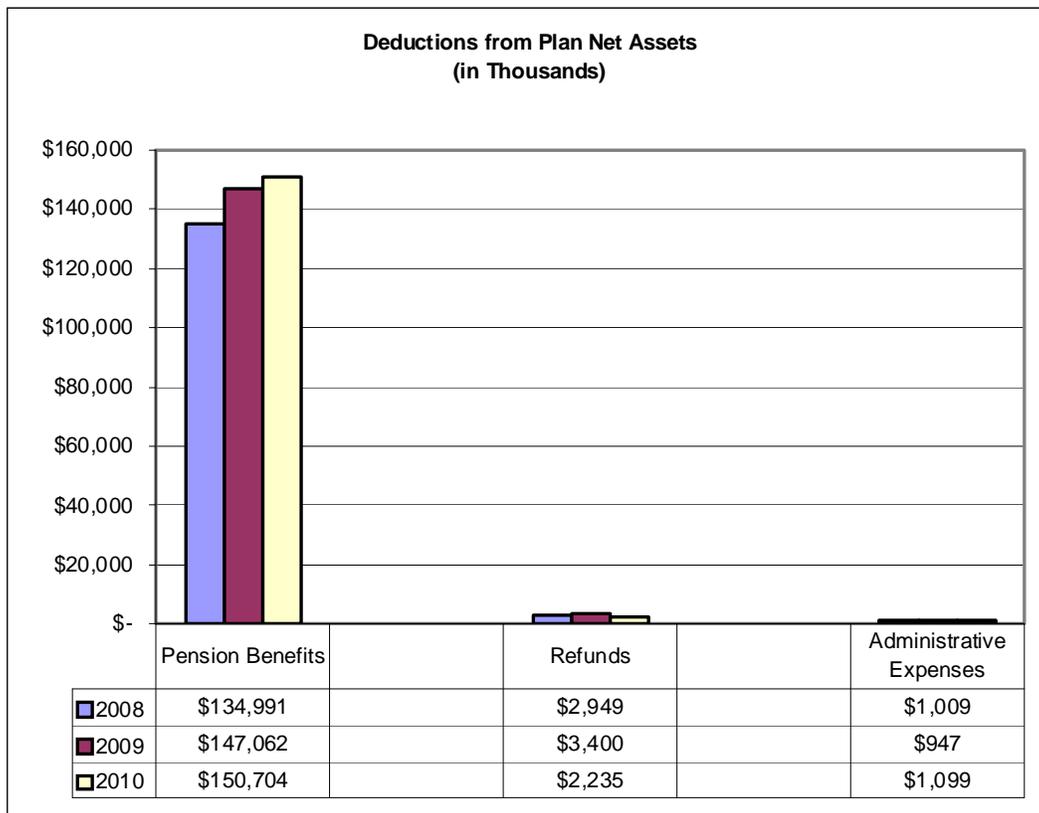
# FINANCIAL SECTION

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

### EXPENSES – DEDUCTIONS FROM PLAN NET ASSETS

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. Deductions for FY 2010 were \$154,038,008, an increase of 1.7% over FY 2009. Deductions for FY 2009 were \$151,409,199, an increase of 9% over FY 2008.

The payment of pension benefits increased by 2.5% or \$3,641,720 in FY 2010 from the previous year. The payment of pension benefits increased by 8.9% or \$12,070,850 in FY 2009 from the previous year. The increase in pension benefit expenditures in FY 2009 resulted from an increase in the Deferred Retirement Option Program (DROP) eligible retirees. The net number of additional retirees was 194 and 60 in FY 2010 and FY 2009, respectively. Administrative expenses for FY 2010 increased by 16% or \$151,494 from the previous year and decreased by 6.1% or \$61,250 for FY 2009.



### RETIREMENT SYSTEM AS A WHOLE

Net assets held in trust for pension benefits increased by \$192 million or 12% in FY 2010. The System's funding ratio, as determined by the County's actuary, was 82.5% at June 30, 2009 and 88.0% at June 30, 2008. During FY 2010, Legislative and Administrative changes were implemented to further improve the financial condition of the System by increasing contributions and reducing benefits. The Board continues to utilize the concepts of prudent investment management, cost controls and strategic planning.

# — FINANCIAL SECTION —

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

### 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, Room 176, 400 Washington Avenue, Towson, Maryland 21204.

# FINANCIAL SECTION

## Employees' Retirement System of Baltimore County Statements of Plan Net Assets As of June 30, 2010 and 2009

|  | 2010            | 2009            |
|--|-----------------|-----------------|
| <i>Assets:</i>                                       |                 |                 |
| Cash and short term investments                      | \$ 41,850,635   | \$ 35,622,644   |
| Collateral for loaned securities                     | 89,733,576      | 126,205,223     |
| Receivables:   |                 |                 |
| Accrued interest and dividend income                 | 3,001,631       | 4,539,048       |
| Receivable for investments sold                      | 25,113,428      | 11,026,445      |
| Receivables - other                                  | 1,224,163       | 668,381         |
| Total Receivables                                    | 29,339,222      | 16,233,874      |
| Investments, at fair value                           |                 |                 |
| U.S. Government and agency securities                | 165,541,960     | 88,197,841      |
| Municipal Bonds                                      | 1,254,795       | -               |
| Foreign bonds  | 28,472,741      | 34,157,136      |
| Corporate bonds                                      | 127,548,325     | 143,819,202     |
| Stocks   | 361,304,324     | 332,319,650     |
| Bond mutual funds                                    | 177,204,936     | 121,548,717     |
| Stock mutual funds                                   | 342,893,597     | 367,974,695     |
| Real estate equity funds                             | 62,671,352      | 69,663,222      |
| Hedge funds  | 94,549,761      | 89,357,333      |
| Private equity funds                                 | 85,405,958      | 73,867,746      |
| Real Assets  | 32,687,677      | -               |
| Global Asset Allocation                              | 285,175,543     | 251,115,876     |
| Total Investments                                    | 1,764,710,969   | 1,572,021,418   |
| <b>Total Assets</b>                                  | 1,925,634,402   | 1,750,083,159   |
| <i>Liabilities:</i>                                  |                 |                 |
| Investment expenses payable                          | 2,060,708       | 2,015,824       |
| Refunds payable                                      | 250,756         | 252,180         |
| Payable for investments purchased                    | 45,464,831      | 27,201,545      |
| Payable for collateral for loaned securities         | 91,448,812      | 126,205,223     |
| Payables - other                                     | 138,320         | 116,557         |
| <b>Total Liabilities</b>                             | 139,363,427     | 155,791,329     |
| <b>Net Assets Held in Trust for Pension Benefits</b> | \$1,786,270,975 | \$1,594,291,830 |

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

# FINANCIAL SECTION

## Employees' Retirement System of Baltimore County Statements of Changes in Plan Net Assets for the Years Ended June 30, 2010 and 2009

|  | 2010            | 2009            |
|--|-----------------|-----------------|
| <b>Additions</b>                                     |                 |                 |
| Contributions:                                       |                 |                 |
| Employers  | \$ 57,976,378   | \$ 49,762,854   |
| Members  | 33,235,627      | 31,422,726      |
| Total contributions                                  | 91,212,005      | 81,185,580      |
| Investment Income/Loss:                              |                 |                 |
| Net increase (decrease)                              |                 |                 |
| in the fair value of investments                     | 232,230,229     | (429,592,199)   |
| Interest and dividends                               | 35,258,077      | 42,317,443      |
|  | 267,488,306     | (387,274,756)   |
| Less: Investment expenses                            | (11,379,864)    | (10,546,119)    |
| Investment Income /(Loss)                            | 256,108,442     | (397,820,875)   |
| Securities Lending:                                  |                 |                 |
| Securities Lending Income                            | 484,525         | 3,255,304       |
| Less:  |                 |                 |
| Net decrease in the fair value of investments        | (1,715,236)     | -               |
| Borrower Rebates                                     | 87,498          | (1,528,132)     |
| Agent Fees   | (160,081)       | (502,073)       |
| Net Income/(Loss) from Securities Lending            | (1,303,294)     | 1,225,099       |
| Total Net Investment Income/(Loss)                   | 254,805,148     | (396,595,776)   |
| TOTAL ADDITIONS, net of investment Income/(Loss)     | 346,017,153     | (315,410,196)   |
| <b>Deductions</b>                                    |                 |                 |
| Benefits   | 150,703,841     | 147,062,121     |
| Refunds of contributions                             | 2,235,269       | 3,399,674       |
| Administrative expenses                              | 1,098,898       | 947,404         |
| TOTAL DEDUCTIONS                                     | 154,038,008     | 151,409,199     |
| <b>Net Increase/Decrease</b>                         | 191,979,145     | (466,819,395)   |
| <b>Net assets held in trust for pension benefits</b> |                 |                 |
| Beginning of year                                    | 1,594,291,830   | 2,061,111,225   |
| End of year  | \$1,786,270,975 | \$1,594,291,830 |

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

# FINANCIAL SECTION

## 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").

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.

As of June 30, 2010 and 2009, System membership consisted of:

|  | 2010   | 2009   |
|--|--------|--------|
| Retirees and beneficiaries currently receiving benefits              |        |        |
| General employees, correctional officers and deputy sheriffs         | 4,679  | 4,548  |
| Firefighters and police officers                                     | 2,025  | 1,962  |
| Total retirees and beneficiaries                                     | 6,704  | 6,510  |
| Terminated employees entitled to benefits but not yet receiving them |        |        |
| General employees, correctional officers and deputy sheriffs         | 465    | 411    |
| Firefighters and police officers                                     | 52     | 53     |
| Terminated employees entitled to benefits but not yet receiving      | 517    | 464    |
| Current employees  |        |        |
| Vested - Full-time employees   |        |        |
| General employees, correctional officers and deputy sheriffs         | 4,028  | 3,982  |
| Firefighters and police officers                                     | 2,399  | 2,382  |
| Non-vested - Full-time employees                                     |        |        |
| General employees, correctional officers and deputy sheriffs         | 1,643  | 1,802  |
| Firefighters and police officers                                     | 519    | 539    |
| Part-time employees  |        |        |
| Vested - General employees   | 602    | 595    |
| Non-vested - General employees                                       | 442    | 472    |
| Total active members   | 9,633  | 9,772  |
| Non-Vested Terminations with account balances                        | 55     | 43     |
| Members on leave of absence  |        |        |
| General employees, correctional officers and deputy sheriffs         | 29     | 32     |
| Firefighters and police officers                                     | 6      | 12     |
| Total members on leave of absence                                    | 35     | 44     |
| Grand Total  | 16,944 | 16,833 |

# FINANCIAL SECTION

## Notes to Financial Statements

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.

Employees, exclusive of firefighters and police officers, may become System members at any time within the first two years of employment. Employees must become System members at the end of the two-year 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 two years. Selection of the option must be made within two years of employment. 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).

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 and correctional officers. Firefighters and police officers must retire at age 60 unless approved for continuation of service by the Board on an annual basis.

The County has adopted a Back DROP, 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 DROP.

The County has adopted a Back DROP 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 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 DROP.

The County has adopted a Forward DROP 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 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 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"), must have 5 years of creditable service, while the general, correctional officers and deputy sheriffs ("Group 3"), must have ten years of creditable service and 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 for Group 3 members 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 for Group 4 members is determined in accordance with Section 5-1-226 of the Code.

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 beneficiary, may receive a retirement allowance based on service years equivalent to a 100% survivorship option (*Option 2*).

# FINANCIAL SECTION

## Notes to Financial Statements

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  $66\frac{2}{3}\%$  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 for the majority of the members as the rate of annual earnable compensation during the twelve or thirty-six consecutive calendar months of service affording the highest average. The normal retirement for service allowance is determined as follows:

| <u>Employee designation</u>                           | <u>Allowance formula for Vested Employees</u>   |
|---|---|
| General employees<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>(iii) Age 60 as of June 30, 2007 and attain 5 years of creditable service.<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<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><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><br><u>If hired on or after July 1, 2007, with less than 20 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   |

# FINANCIAL SECTION

## Notes to Financial Statements

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. Eligible police officers and firefighters, may select a 7<sup>th</sup> 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 12 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 4%, 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 4% COLA. Certain legislative changes to the Plan, approved by Council will take effect on July 1, 2010, are summarized on Page 65 in the Actuarial Section of this report.

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

*New Accounting Standards* - In June 2008, the Governmental Accounting Standards Board issued Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* (GASB 53). GASB 53 provides a comprehensive framework for the measurement, recognition, and disclosure of derivative instrument transactions. It also enhances the usefulness and comparability of derivative instrument information reported by state and local governments. The System implemented GASB 53 in the Comprehensive Annual Financial Report for the period ended June 30, 2010.

*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 mutual funds is based on the fair value of the underlying securities. Hedge fund of funds are valued based on information provided by the respective fund managers. The fair value for alternative investments which include private equity funds is based on information provided by the applicable fund managers (generally the last available independently audited Financial Statements adjusted for cash flows).

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

*Net Asset 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 net assets held in trust for pension benefits for financial reporting purposes and are explained as follows:

# FINANCIAL SECTION

## Notes to Financial Statements

*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 and other benefits. 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, 2010 and 2009, the balances in the legally required accounts are as follows:

|   | 2010            | 2009            |
|---|-----------------|-----------------|
| Annuity Savings Fund                          | \$447,377,958   | \$ 417,514,605  |
| Pension Accumulation Fund                     | 1,294,070,239   | 1,130,734,551   |
| Post-Retirement Increase Fund                 | 44,822,778      | 46,042,674      |
| Net Assets Held in Trust for Pension Benefits | \$1,786,270,975 | \$1,594,291,830 |

### 3. 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 is 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.

The participating employers are required to contribute on an actuarially determined basis. 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 2010 Schedule of Employers' Contributions is shown below.

| Fiscal Year<br>Ended<br>June 30 | Annual<br>Required<br>Contribution | Percentage<br>Contributed |
|---------------------------------|------------------------------------|---------------------------|
| 2010                            | \$57,976,378                       | 100%                      |

### 4. Funding Policy

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 payroll. 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. Based on the latest actuarial valuation, the FY 2009 Schedule of Funding Progress is shown below in thousands.

# FINANCIAL SECTION

## Notes to Financial Statements

| Actuarial Valuation Date<br>June 30 | Actuarial Value of Assets<br>(a) | Actuarial Accrued Liability (AAL)<br>(b) | Unfunded (Excess of) AAL (UAAL)<br>(b-a) | Funded Ratio<br>(a/b) | Covered Payroll<br>(c) | UAAL (Excess of) as a % of Covered Payroll<br>((b-a)/c) |
|-------------------------------------|----------------------------------|--|--|-----------------------|------------------------|---|
| 2009*                               | \$2,143,616                      | \$2,599,670                              | \$456,054                                | 82.5%                 | \$506,908              | 90.0%   |

\*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 are reduced.

The schedules of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the AALs for benefits.

The County's commitment to provide a financially sound retirement plan for its members is illustrated on two schedules contained in this report. The six year "Schedule of Funding Progress," providing historical trend information, found in the Required Supplementary Information of the Financial Section, expresses plan net assets as a percentage of the actuarial accrued liability, providing one indication of the System's funding status on a going-concern basis.

Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Trends in the unfunded actuarial accrued liability (or excess of) as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the System's progress made in accumulating sufficient assets to pay benefits when due. The six year "Schedule of Employer Contributions" found in the Required Supplementary Information of the Financial Section, includes historical trend information about the annual required contributions (ARC) of the employers and the contributions made by the employers in relation to the ARC. The System's percentages indicate a financially sound retirement system.

Information about the actuarial methods and assumptions used to determine the funded status and the ARC is presented below:

|  |   |
|--|---|
| Valuation Date:                              | June 30, 2009                                       |
| Actuarial Cost Method <sup>(1)</sup> :       | Projected Unit Credit                               |
| Normal Cost Allocation:                      | Service   |
| Amortization Method:                         | Level percent closed                                |
| Remaining Amortization Period:               | 29 Years  |
| Asset Valuation Method <sup>(2)</sup> :      | 5-year smoothed market without corridor             |
| Actuarial Assumptions:                       |   |
| -Investment Rate of Return <sup>(3)</sup>    | 7.875%  |
| -Projected Salaried Increases <sup>(3)</sup> | 3.00% – 7.50%                                       |
| -Cost-of-Living Adjustments <sup>(4)</sup>   | None  |
| -Mortality Rates <sup>(5)</sup>              | Based on the 1995 George B. Buck Mortality Table +1 |

1. Cost Method changed to Projected Unit Credit for June 30, 2005 valuation. All pre-FY07 contributions determined using Entry Age Normal.
2. Actuarial Asset Method was revised to remove 14% Corridor Around Market Value and the smoothing period was changed from 4 to 5 years for June 30, 2009 valuation.
3. Includes Inflation at 3%.
4. Increases equal to the CPI up to a maximum of 4% are granted only if sufficient reserves have accumulated in the Post-Retirement Increase Fund Balance Account.
5. The mortality rates based on the 1995 George B. Buck Mortality Table is presented on Page 52 in the Actuarial Section of this report.

# FINANCIAL SECTION

## Notes to Financial Statements

### 5. 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, 2010, the carrying amount of cash was \$421,258.

*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, 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, 2010, the System has operated in all material respects within accordance of the System’s investment policy.

### Investment

The following is a maturity schedule of the System’s fixed income investments of bonds and short term investments.

### Investment Maturities (in Years)

*(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 | \$ 101,706       | \$ 34           | \$ 21,420       | \$ 33,806        | \$ 19,516       | \$23,619        | \$ 3,311        |
| U.S. Agency Securities | 63,836           | 2,492           | 6,609           | 19,797           | 10,059          | 24,879          | -               |
| Municipals             | 1,255            | -               | -               | -                | -               | 148             | 1,107           |
| Corporate Debt         | 127,548          | 6,456           | 31,932          | 26,870           | 18,802          | 24,367          | 19,121          |
| Bond Mutual Funds      | 177,205          | -               | -               | 177,205          | -               | -               | -               |
| Foreign Debt           | 28,473           | 16,537          | 2,618           | 6,644            | 788             | 1,166           | 720             |
| Total                  | <u>\$500,023</u> | <u>\$25,519</u> | <u>\$62,579</u> | <u>\$264,322</u> | <u>\$49,165</u> | <u>\$74,179</u> | <u>\$24,259</u> |

*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.

# FINANCIAL SECTION

## Notes to Financial Statements

*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. Investment in high yield securities are limited to 20% in the guidelines for fixed income managers, except for Pimco Diversified Fixed Income Fund, which targets 1/3 of their portfolio in high yield securities.

As of June 30, 2010, the System's fixed income investments had the following risk characteristics:

| Moody's Ratings or Comparable | Market Value (In Thousands) | Percent of Fixed Income Investments |
|-------------------------------|-----------------------------|-------------------------------------|
| AAA                           | \$ 174,731                  | 34.95%                              |
| AA                            | 8,601                       | 1.72                                |
| A                             | 43,599                      | 8.72                                |
| BBB                           | 28,236                      | 5.65                                |
| BB                            | 6,537                       | 1.31                                |
| B                             | 7,152                       | 1.43                                |
| CCC                           | 5,823                       | 1.16                                |
| CC                            | 954                         | 0.19                                |
| C                             | 61                          | 0.01                                |
| D                             | 715                         | 0.14                                |
| NR*                           | <u>223,614</u>              | <u>44.72</u>                        |
| Total                         | <u>\$500,023</u>            | <u>100.00%</u>                      |

\*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 Net Assets Held in Trust for Pension Benefits*

The System had no investments at fair value in excess of 5% of the System's net assets held in trust for pension benefits as of June 30, 2010.

### *Investment Commitments*

As of June 30, 2010, the System had \$48 million in outstanding private equity commitments.

*Foreign Investments/Forward Exchange Contracts* – Foreign investments include equity and fixed income securities. In conjunction with certain foreign investments, the System has entered into forward exchange contracts to sell or purchase certain foreign currencies at specified rates at stated dates. The System continues to invest in similar contracts. At June 30, 2010, the System's contracts to purchase and sell by foreign currencies were as follows:

| Forward Exchange Contracts as of June 30, 2010 |                 |                        |
|--|-----------------|------------------------|
| Currency                                       | Purchases       | Unrealized Gain/(Loss) |
| Euro Currency unit                             | \$51,109        | (\$79)                 |
| Danish Krone                                   | <u>46,597</u>   | <u>(60)</u>            |
|  | <u>\$97,706</u> | <u>(\$139)</u>         |

# FINANCIAL SECTION

## Notes to Financial Statements

### *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, 2010 is as follows:

| Currency               | Fair Value<br>(\$ in thousands) |
|------------------------|---------------------------------|
| Australian Dollar      | \$3,657                         |
| British Pound Sterling | 13,488                          |
| Danish Krone           | 1,460                           |
| Euro Currency Unit     | 48,540                          |
| Hong Kong Dollar       | 9,461                           |
| Japanese Yen           | 28,936                          |
| Norwegian Krone        | 563                             |
| Singapore Dollar       | 1,385                           |
| South Korean Won       | 4,117                           |
| Swedish Krona          | 3,635                           |
| Swiss Franc            | 8,259                           |
| Total                  | <u>\$123,501</u>                |

Future contracts are standardized, exchange-traded contracts to purchase or sell a specific financial instrument at a predetermined price. 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, 2010 are as follows:

| <u>Futures Contracts as of June 30, 2010</u> |                      |                       |
|--|----------------------|-----------------------|
| <u>Currency</u>                              | <u>Buy Contracts</u> | <u>Sell Contracts</u> |
| US 10YR NOTE FUTURE (CBT)                    | -                    | \$11,632,617          |
| US 5YR TREAS NTS FUT(CBT)                    | -                    | 1,360,503             |
| US ULTRA BOND (CBT)                          | \$6,752,800          | -                     |

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, 2010, classified by type and the changes in fair value of such derivative instruments for the year then ended are as follows:

| Investment Derivatives: | <u>Changes in Fair Value</u> |               | <u>Fair Value as of June 30, 2010</u> |                       |
|-------------------------|------------------------------|---------------|---------------------------------------|-----------------------|
|                         | <u>Classification</u>        | <u>Amount</u> | <u>Amount</u>                         | <u>Notional Value</u> |
| Futures                 |                              | -             | -                                     | \$6,250,937           |
| Options                 | Unrealized Gain              | \$19,117      | \$15,446                              | 2,941,118             |
| Swaps                   | Unrealized Loss              | (\$370,974)   | (\$562,412)                           | \$3,384,418           |

### *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.

# FINANCIAL SECTION

## Notes to Financial Statements

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.

*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, 2010, 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 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 has a weighted-average maturity of 13 days. The collateral held as of June 30, 2010 and 2009 was \$92,153,741 and \$126,205,223, respectively. The fair value of securities on loan as of June 30, 2010 and 2009 totaled \$89,252,988 and \$121,997,087, respectively. At June 30, 2010, the cash collateral pool had an unrealized loss of approximately \$1.7 million which is recorded in the Statement of Changes in Plan Net Assets as a decrease in the fair value of investments for securities lending.

### 6. 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.

### 7. 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 at a younger age. The 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. The County believes that it will prevail again on remand. The County has also called upon its long-term actuary, Buck Consultants, to defend, indemnify and hold the County harmless in the action. EEOC's claim for "excess contributions" by older workers is estimated to be \$17 million to \$19 million. The Employees' Retirement System of Baltimore County would absorb any potential liability through higher member contributions.

### 8. Subsequent Events

There were no subsequent events or transactions occurring after June 30, 2010, but prior to December 17, 2010 that provided additional evidence about conditions that existed at June 30, 2010.

# FINANCIAL SECTION

## Required Supplementary Information (Unaudited)

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

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

| Actuarial Valuation Date<br>June 30 | Actuarial Value of Assets<br>(a) | Actuarial Accrued Liability (AAL)<br>(b) | Unfunded (Excess of) AAL (UAAL)<br>(b-a) | Funded Ratio<br>(a/b) | Covered Payroll<br>(c) | UAAL (Excess of) as a % of Covered Payroll<br>(b-a)/c |
|-------------------------------------|----------------------------------|--|--|-----------------------|------------------------|---|
| 2004 <sup>(1)</sup>                 | \$1,803,811                      | \$1,924,543                              | \$120,732                                | 93.7%                 | \$370,639              | 32.6%   |
| 2005 <sup>(2)</sup>                 | 1,832,922                        | 1,949,611                                | 116,689                                  | 94.0                  | 388,052                | 30.1  |
| 2006                                | 1,938,817                        | 2,078,812                                | 139,995                                  | 93.3                  | 425,400                | 32.9  |
| 2007 <sup>(3)</sup>                 | 2,101,023                        | 2,289,452                                | 188,429                                  | 91.8                  | 439,913                | 42.8  |
| 2008 <sup>(4)</sup>                 | 2,191,623                        | 2,491,342                                | 299,719                                  | 88.0                  | 479,654                | 62.5  |
| 2009 <sup>(5)</sup>                 | 2,143,616                        | 2,599,670                                | 456,054                                  | 82.5                  | 506,908                | 90.0  |

- (1) Asset method change: 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. The amendments of GASB Statement No. 50 were recognized, but they had no impact on the information disclosed.
- (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 are reduced.

### Schedule of Employers' Contributions

| Fiscal Year Ended<br>June 30 | Annual Required Contribution | Percentage Contributed |
|------------------------------|------------------------------|------------------------|
| 2005                         | \$29,967,618                 | 100%                   |
| 2006                         | 34,433,062                   | 100                    |
| 2007                         | 40,065,314                   | 100                    |
| 2008                         | 44,167,525                   | 100                    |
| 2009                         | 49,762,854                   | 100                    |
| 2010                         | 57,976,378                   | 100                    |

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information regarding the assumptions and methods used as of the latest actuarial valuation may be found in "Note 4 – Funding Policy" in the notes to the financial statements, and in the Actuarial Section of this report.

# FINANCIAL SECTION

## Supplementary Supporting Schedules

### Schedule of Investment Expenses

For the Years Ended June 30, 2010 and 2009

|                                  | 2010                | 2009                |
|----------------------------------|---------------------|---------------------|
| Investment Managers:             |                     |                     |
| Equity managers                  | \$ 3,678,626        | \$ 3,153,677        |
| Fixed Income managers            | 1,813,237           | 1,656,543           |
| Real Estate managers             | 732,342             | 1,067,023           |
| Hedge Fund managers              | 948,118             | 892,964             |
| Private Equity managers          | 1,477,702           | 1,434,591           |
| Global Asset Allocation managers | 2,213,166           | 1,825,466           |
| Real Asset managers              | 14,193              | -                   |
| Total manager fees               | 10,877,384          | 10,030,264          |
| Investment Service Fees:         |                     |                     |
| Custodian fees                   | 292,606             | 292,271             |
| Consultant fees                  | 209,874             | 223,584             |
| Total service fees               | 502,480             | 515,855             |
| Subtotal - Investment Expenses   | 11,379,864          | 10,546,119          |
| Security Lending Fees:           |                     |                     |
| Agent fees                       | 160,081             | 502,073             |
| Borrower rebates                 | (87,498)            | 1,528,132           |
| Total Security Lending fees      | 72,583              | 2,030,205           |
| <b>Total Investment Expenses</b> | <b>\$11,452,447</b> | <b>\$12,576,324</b> |

### Schedule of Administrative Expenses

For the Years Ended June 30, 2010 and 2009

|                                      | 2010               | 2009             |
|--------------------------------------|--------------------|------------------|
| Personal Services:                   |                    |                  |
| Salaries                             | \$ 475,697         | \$ 462,085       |
| Employee Fringe benefits             | 157,312            | 149,860          |
| Total Personal Services              | 633,009            | 611,945          |
| Professional Services:               |                    |                  |
| Actuarial                            | 233,410            | 68,856           |
| Legal and Financial                  | 16,992             | 36,769           |
| Data Processing                      | 92,310             | 82,502           |
| Medical                              | 26,462             | 37,752           |
| Audit                                | 29,300             | 37,378           |
| Total Professional Services          | 398,415            | 263,257          |
| Communication:                       |                    |                  |
| Printing                             | 8,998              | 10,519           |
| Telephone                            | 2,368              | 2,186            |
| Postage                              | 34,883             | 45,557           |
| Total Communication                  | 46,249             | 58,262           |
| Miscellaneous:                       |                    |                  |
| Equipment and Supplies               | 21,166             | 13,940           |
| <b>Total administrative expenses</b> | <b>\$1,098,898</b> | <b>\$947,404</b> |

#### **Board of Trustees**

The members of the Board serve without compensation.

***INVESTMENT  
SECTION***

# INVESTMENT SECTION

## INVESTMENT CONSULTANT'S REPORT

### Introduction

This report, prepared for the Baltimore County Employees' Retirement System (the "System") by New England Pension Consultants (NEPC), 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 in compliance with applicable standards of the CFA Institute. The returns 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 policies. 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 6/30/2010

| <i>Asset Class</i>             | <i>Allocation Target</i>  | <i>Allocation Range</i> |
|--------------------------------|---------------------------|-------------------------|
| <i>U. S. Equities</i>          | <i>26%</i>                | <i>19 - 33%</i>         |
| <i>International Equities</i>  | <i>13%</i>                | <i>10 - 17%</i>         |
| <i>Private Equities</i>        | <i>5%</i>                 | <i>0 - 7%</i>           |
| <i>Fixed Income</i>            | <i>26%</i>                | <i>18 - 35%</i>         |
| <i>Hedge FOF</i>               | <i>5%</i>                 | <i>0 - 7%</i>           |
| <i>Real Estate</i>             | <i>5%</i>                 | <i>0 - 7%</i>           |
| <i>Global Asset Allocation</i> | <i>15%</i>                | <i>10 - 20%</i>         |
| <i>Real Asset</i>              | <i>5%</i>                 | <i>0 - 7%</i>           |
| <b><i>Total</i></b>            | <b><i><u>100%</u></i></b> |                         |

# INVESTMENT SECTION

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 Independent Consultants Cooperative (ICC) Public Funds Universe, one of the largest, most representative universes of actual institutional performance results in the industry. At June 30, 2010, this universe contained actual public fund data for 170 public plans with an aggregate market value of \$1 trillion.

## **Market Overview**

During the past fiscal year the Federal Reserve's Open Market Committee held short-term rates steady at the target range of 0.0 – 0.25% as it saw little risk of near term inflation, coupled with continuing signs of a less than robust economic recovery. Official unemployment remained relatively high, with much of the improvement in the official figures due to Americans dropping out of the job search, and therefore no longer counting as unemployed in the government estimates. The 2010 US Census provided a brief sustenance of jobs, but was quickly unwound. Residential housing also continues to linger on the edge of recovery and continued decline. The expiration of the federal tax credit in April, expanded to include existing homeowners as well as first time buyers, was marked by a drop off in sales for both new and existing homes. Prices through the 2nd quarter were up 1.3% from a year earlier.

Gross Domestic Product (GDP) numbers, as released by the Bureau of Economic Analysis, also reflect the wavering economic recovery. After a sharp increase in real GDP in the 4<sup>th</sup> quarter of 2009, growth tapered off as many government stimulus programs came to an end and consumer spending and private investment failed to emerge as a source of strength.

US Equity returns over the fiscal year remained sharply higher on a one-year basis, though the final quarter of the fiscal year was sharply negative. Large cap stocks, as represented by the S&P 500 Index, were up 14.4%, but lagged small cap stocks (Russell 2000 Index) which posted a 21.5% return. On a stylistic basis, value stocks generally fared better than growth counterparts. The Russell 1000 Value Index rose 16.9%, while the Russell 1000 Growth Index returned 13.6%, and the Russell 2000 Value Index posted a 25.1% gain for the year versus Russell 2000 Growth Index return of 18.0%.

US Fixed Income returns were positive during fiscal year 2010. The Barclays Capital Aggregate Bond Index returned 9.5%. High Yield bonds were the best performing segment of the US bond market returning 26.8% for the one-year period ended 6/30/2010. US Treasury bonds have also held up well as investors resorted to US government debt as equity markets fell off during the final quarter of the fiscal year.

International developed market equities, represented by the MSCI EAFE (net) Index, a broad index of the international developed market equities returned 5.9% for the year ended June 30, 2010. Emerging markets equities, as measured by the MSCI Emerging Index returned 23.2%. Developed markets were hurt by a resurgence of double-dip recession fears compounded by the Greek debt crisis, falling more than 13% in the last two quarters of the fiscal year. Emerging Market bonds continued to gain favor as investors fled Europe in the wake of Greece's debt troubles and the relative strength of many Emerging Market nation's balance sheets. The JPM EMBI Plus, a key barometer for emerging market debt, returned 17.4% for the year. The Citigroup World Government Bond index, held back by developed Europe, returned 1.3% for the one-year period ending June 30, 2010.

# INVESTMENT SECTION

## Investment Performance

For the fiscal year ended June 30, 2010, the System's investment portfolio gained 16.4%, including dividends and interest income, unrealized gains and losses, and management fees and expenses.

The System's domestic equity portfolio posted a 17.3% net of fee return over the fiscal year as compared to a 15.7% return of the broad U.S. equity market, as measured by the Wilshire 5000 Index. Strong performance among the large cap managers added to the overall domestic equity return over the full year. The System's non-US equity portfolio's net of fee return of 16.1% exceeded the 10.4% return of the international equity benchmark due to strong performance from the developed markets managers. The fixed income portfolio returned 19.3% on a net of fee basis over the fiscal year and exceeded the broad domestic bond market by 8.7%. All of the core fixed income and credit-oriented fixed income managers posted strong gains relative to the broad market.

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 ICC Universe of Public Funds. The System's gross of fee return of 16.4% ranked in the top decile (8<sup>th</sup> percentile) of the ICC Public Funds Universe for the fiscal year. The market value of the System's combined assets increased from \$1.596 billion on June 30, 2009 to \$1.788 billion on June 30, 2010. The increase in assets was driven primarily by investment gains of approximately \$255 million plus net withdrawals of approximately \$64 million.

The net of fee returns for the fiscal year ending June 30, 2010 are shown in the following table.

|                        | Market Value<br>(in Millions) | Percent of<br>Total | Fiscal Year Rate of Return |              |
|------------------------|-------------------------------|---------------------|----------------------------|--------------|
|                        |                               |                     | System                     | Benchmark    |
| U S Equities           | \$ 500.3                      | 28.0%               | 17.3%                      | 15.7%        |
| International Equities | 213.9                         | 12.0                | 16.1                       | 10.4         |
| Private Equity         | 85.4                          | 4.8                 | 12.0                       | 13.1         |
| Hedge Funds            | 94.5                          | 5.3                 | 8.8                        | 4.7          |
| Real Estate            | 62.7                          | 3.5                 | (8.2)                      | (1.5)        |
| Fixed Income           | 508.9                         | 28.4                | 19.3                       | 10.6         |
| GAA                    | 285.2                         | 15.9                | 17.0                       | 8.6          |
| Real Assets            | 32.7                          | 1.8                 | N/A                        | N/A          |
| Cash                   | 5.2                           | 0.3                 | 1.7                        | 0.2          |
| <b>Total Fund*</b>     | <b>\$1,788.8</b>              | <b>100.0%</b>       | <b>16.4%</b>               | <b>12.5%</b> |

\*The Total Fund shown above in the amount of \$1,788.8 includes short-term investments of \$41.4, accrued interest and dividends receivable of \$3.0, receivables for investment sold of \$25.1 and payables of \$45.4. These items are separately reported from "Total Investments" in the Statement of Plan Net Assets.

## Investment Strategies

During the fiscal year, the Trustees conducted an annual asset allocation review and added an allocation to real assets. The Trustees elected to fund the 5% allocation to real assets over an extended time period. As such, the real assets portfolio had not been fully funded as of June 30, 2010.

John Krimmel, CPA, CFA  
Senior Consultant

# INVESTMENT SECTION

## 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 26% in U.S. equities, 13% in international equities, 26% in core-plus fixed income investments, 5% in real estate, 5% in hedge funds, 5% in private equity, 15% to global asset allocation strategies and 5% to 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. The Balanced Index was changed in February 2005 to reflect the results of an asset/liability study conducted on behalf of the System's portfolio.

From February 2005 through June 30, 2007, the Balanced Index is 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 Venture Capital Index; 5% HFRI Fund of Fund Index. From October 2006 the Cambridge Venture Capital Index was replaced with the Venture Economics Private Equity Index.

From July 1, 2007 to May 31, 2010, the Balanced Index is 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 Venture Capital Index; 5% HFRI Fund of Fund Index.

From June 1, 2010 to the present, the Balanced Index is 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 Venture Capital Index; 5% HFRI Fund of Fund Index; 5% Dow Jones-UBS Commodity Index.

# INVESTMENT SECTION

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)

| <b><u>Rates of Return</u></b>                          | <b><u>FY</u></b><br><b><u>2006</u></b> | <b><u>FY</u></b><br><b><u>2007</u></b> | <b><u>FY</u></b><br><b><u>2008</u></b> | <b><u>FY</u></b><br><b><u>2009</u></b> | <b><u>FY</u></b><br><b><u>2010</u></b> | <b>Annualized</b><br><b>Rate Over</b><br><b><u>3 Years</u></b> | <b>Annualized</b><br><b>Rate Over</b><br><b><u>5 Years</u></b> |
|--|--|--|--|--|--|--|--|
| U.S. Common Stock                                      | 9.2%                                   | 19.8%                                  | (13.2%)                                | (26.8%)                                | 17.3%                                  | (9.3%)   | (0.5%)   |
| Wilshire 5000 Stock Index                              | 9.9                                    | 20.5                                   | (12.5)                                 | (26.4)                                 | 15.7                                   | (9.4)  | (0.3)  |
| International Common Stock                             | 25.5                                   | 32.5                                   | (5.9)                                  | (26.0)                                 | 16.1                                   | (6.8)  | 6.1  |
| MSCI ACWIXUS   | 27.9                                   | 29.6                                   | (6.6)                                  | (30.9)                                 | 10.4                                   | (10.7)   | 3.4  |
| GAA  | -                                      | -                                      | 3.1                                    | (20.2)                                 | 17.0                                   | (1.3)  | -  |
| 60% MSCI World / 40% WGBI &<br>90- day T-Bills plus 6% | -                                      | 15.1                                   | (3.7)                                  | (14.7)                                 | 8.6                                    | (3.7)  | -  |
| Fixed Income   | 0.1                                    | 6.2                                    | 4.0                                    | 3.2                                    | 19.3                                   | 8.6  | 6.4  |
| Barclays Universal*                                    | (0.8)                                  | 6.6                                    | 6.2                                    | 4.9                                    | 10.6                                   | 7.2  | 5.6  |
| Real Estate  | -                                      | 19.4                                   | 6.4                                    | (37.0)                                 | (8.2)                                  | (14.9)   | -  |
| NCREIF Index   | -                                      | 17.2                                   | 9.2                                    | (30.7)                                 | (1.5)                                  | (4.7)  | -  |
| Hedge Funds  | -                                      | 15.9                                   | (0.2)                                  | (15.7)                                 | 8.8                                    | (2.9)  | -  |
| Hedge Fund-of-Funds Index                              | -                                      | 13.6                                   | (0.3)                                  | (15.2)                                 | 4.7                                    | (4.0)  | -  |
| Private Equity   | 12.8                                   | 20.7                                   | 18.1                                   | (16.8)                                 | 12.0                                   | 2.6  | 7.7  |
| Private Equity Benchmark**                             | 15.5                                   | 54.4                                   | 16.0                                   | (21.0)                                 | 13.1                                   | 2.1  | 9.6  |
| Total System Portfolio                                 | 9.2                                    | 17.2                                   | (4.5)                                  | (17.5)                                 | 16.4                                   | (2.9)  | 3.3  |
| <b><u>Comparative Index</u></b>                        |  |  |  |  |  |  |  |
| Balanced Index   | 10.1                                   | 17.6                                   | (3.8)                                  | (14.4)                                 | 12.5                                   | (2.5)  | 3.6  |
| <b><u>Inflation Rate</u></b>                           |  |  |  |  |  |  |  |
| Consumer Price Index                                   | 4.3                                    | 2.7                                    | 4.9                                    | (1.2)                                  | 1.1                                    | 1.5  | 1.3  |

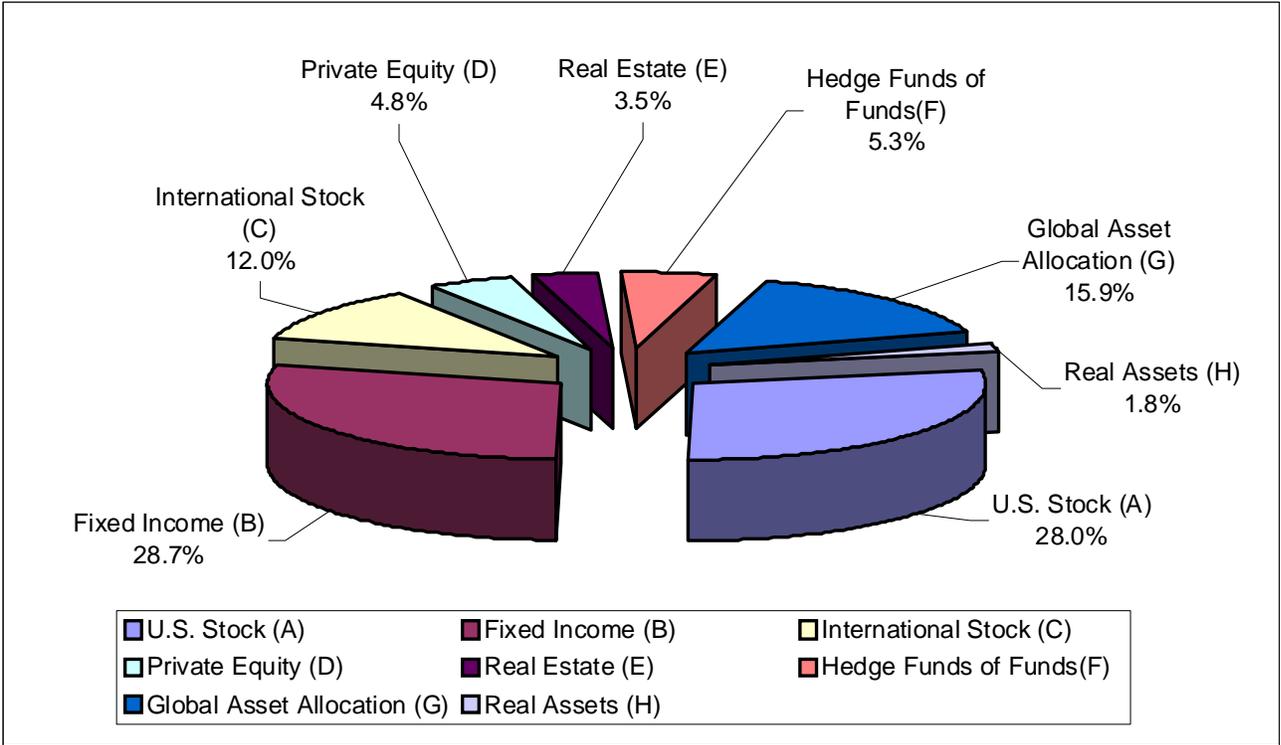
Note: Performance is gross of fees.

\*The Lehman Brothers Universal Index was used for the FY2007 Fixed Income composite index. Prior to FY2007, the Lehman Brothers Aggregate Index was used as the benchmark. For FY 2009 Barclays Universal Index replaced the Lehman Brothers Universal Index.

\*\*The benchmark was the Wilshire 5000 + 5% through April 1, 2004 when it was changed to the Cambridge Venture Capital Index. In October 2006, the benchmark changed to the Venture Economics Private Equity Index. Note: there is a quarter lag in returns

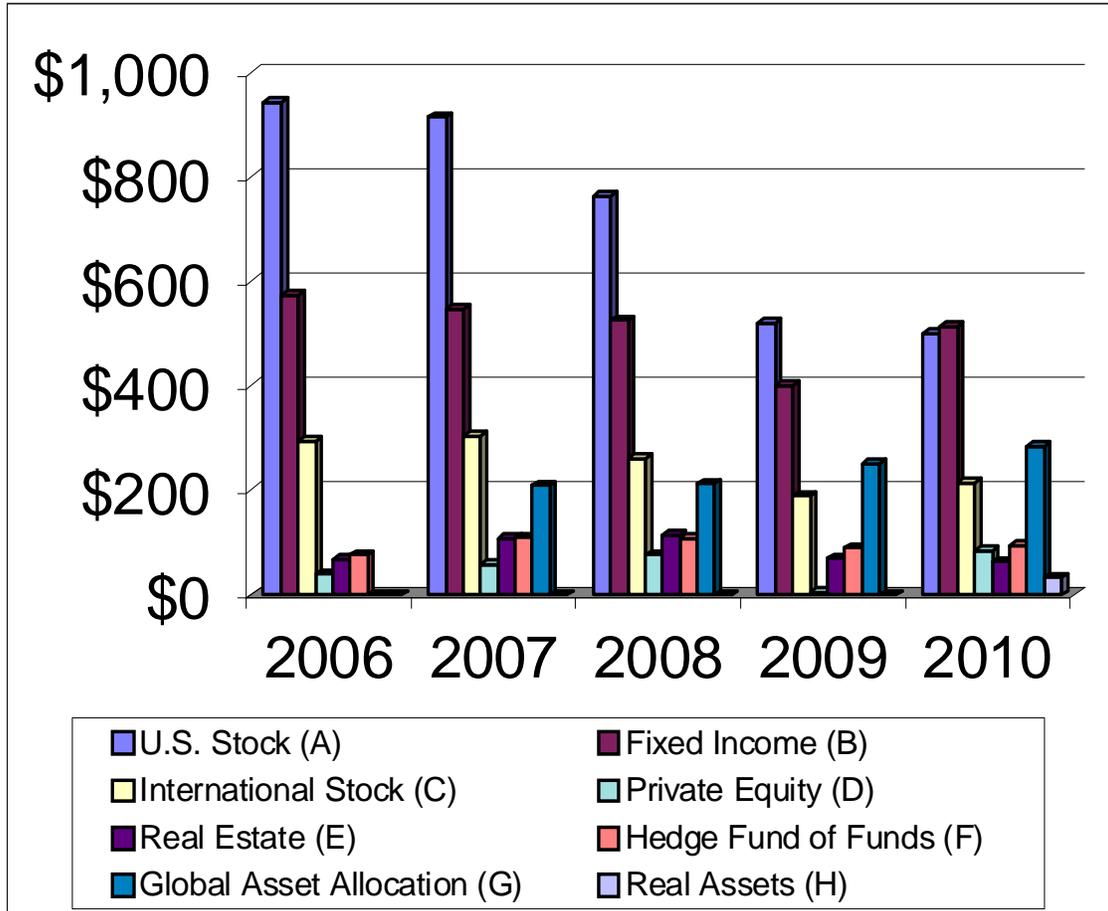
# INVESTMENT SECTION

**Portfolio Composition by Manager Type  
Market Value of Investments  
Percent of Total Fund  
As of June 30, 2010**



# INVESTMENT SECTION

**Portfolio Composition by Manager Type  
Market Value of Investments  
Percent of Total Fund  
As of June 30, 2006, 2007, 2008, 2009 & 2010  
(Expressed in Millions)**



| Investment Type         | 2006             |               | 2007             |               | 2008             |               | 2009             |               | 2010             |               |
|-------------------------|------------------|---------------|------------------|---------------|------------------|---------------|------------------|---------------|------------------|---------------|
| U.S. Stock (A)          | \$943.1          | 47.2%         | \$914.8          | 40.7%         | \$764.4          | 37.0%         | \$520.2          | 32.6%         | \$500.3          | 28.0%         |
| Fixed Income (B)        | 574.4            | 28.9%         | 547.7            | 24.3%         | 525.6            | 25.5%         | 402.1            | 25.3%         | 514.1            | 28.7%         |
| International Stock (C) | 294.2            | 14.7%         | 304.9            | 13.5%         | 261.0            | 12.7%         | 189.6            | 11.9%         | 213.9            | 12.0%         |
| Private Equity (D)      | 40.3             | 2.0%          | 58.5             | 2.6%          | 76.8             | 3.7%          | 73.9             | 4.5%          | 85.4             | 4.8%          |
| Real Estate (E)         | 67.4             | 3.4%          | 108.8            | 4.8%          | 115.4            | 5.6%          | 69.7             | 4.4%          | 62.7             | 3.5%          |
| Hedge Fund of Funds (F) | 76.6             | 3.8%          | 109.0            | 4.8%          | 107.5            | 5.2%          | 89.4             | 5.6%          | 94.5             | 5.3%          |
| Global Asset Alloc. (G) | 0.0              | 0.0%          | 209.3            | 9.3%          | 212.4            | 10.3%         | 251.1            | 15.7%         | 285.2            | 15.9%         |
| Real Assets (H)         | 0.0              | 0.0%          | 0.0              | 0.0%          | 0.0              | 0.0%          | 0.0              | 0.0%          | 32.7             | 1.8%          |
| <b>Total</b>            | <b>\$1,996.0</b> | <b>100.0%</b> | <b>\$2,253.0</b> | <b>100.0%</b> | <b>\$2,063.1</b> | <b>100.0%</b> | <b>\$1,596.0</b> | <b>100.0%</b> | <b>\$1,788.8</b> | <b>100.0%</b> |

# INVESTMENT SECTION

## List of Largest Assets Held (June 30, 2010)

| <b>Ten Largest Equity Holdings<br/>(STOCKS)</b>                  |                            | PAR VALUE/<br>SHARES | MARKET<br>VALUE  |                      |                 |
|--|----------------------------|----------------------|------------------|----------------------|-----------------|
| 1)   | MasterCard Inc.            | 23,767               | \$4,742,311      |                      |                 |
| 2)   | Berkshire Hathaway Inc.    | 56,439               | 4,497,618        |                      |                 |
| 3)   | Canadian Natl. Railway Co. | 57,454               | 3,296,713        |                      |                 |
| 4)   | Google Inc.                | 6,875                | 3,058,921        |                      |                 |
| 5)   | Disney Walt Co.            | 93,446               | 2,943,537        |                      |                 |
| 6)   | Li & Fung                  | 625,786              | 2,824,700        |                      |                 |
| 7)   | American Express Co.       | 70,801               | 2,810,795        |                      |                 |
| 8)   | Wells Fargo & Co.          | 102,704              | 2,629,210        |                      |                 |
| 9)   | Exxon Mobil Corp.          | 44,632               | 2,547,129        |                      |                 |
| 10)  | Kraft Foods Inc.           | 89,846               | 2,515,676        |                      |                 |
| <b>Ten Largest Fixed Income Holdings<br/>(NOTES &amp; BONDS)</b> |                            | INTEREST<br>RATE     | MATURITY<br>DATE | PAR VALUE/<br>SHARES | MARKET<br>VALUE |
| 1)   | US Treasury Note           | 1.00%                | 9/30/2011        | 16,760,210           | \$16,875,271    |
| 2)   | US Treasury Note           | 0.875                | 2/29/2012        | 13,355,723           | 13,426,977      |
| 3)   | FNMA Pool                  | 4.000                | 1/01/2020        | 4,130,147            | 4,367,483       |
| 4)   | US Treasury                | 3.125                | 4/30/2017        | 4,071,162            | 4,255,564       |
| 5)   | US Treasury                | 3.125                | 1/31/2017        | 3,724,491            | 3,895,239       |
| 6)   | FHLMC Multiclass MTG       | 4.000                | 12/15/2024       | 2,846,449            | 2,991,802       |
| 7)   | FNMA Pool                  | 5.000                | 6/01/2035        | 2,649,189            | 2,815,252       |
| 8)   | US Treasury Bonds          | 4.375                | 11/15/2039       | 2,577,810            | 2,782,782       |
| 9)   | Federal Home LN MTG Corp.  | 0.263                | 1/11/2012        | 2,688,923            | 2,685,495       |
| 10)  | Federal Home LN MTG Corp.  | 0.301                | 9/19/2011        | 2,333,363            | 2,332,745       |

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

# INVESTMENT SECTION

## Supplementary Supporting Schedules Schedule of Fees

(Year Ended June 30, 2010)

(in Thousands)

| <u>Investment Services</u>       | <u>Assets Under Management*</u> | <u>Fees</u>     |
|----------------------------------|---------------------------------|-----------------|
| Domestic Equity Managers         | \$500,352                       | \$2,350         |
| International Equity Managers    | 213,888                         | 1,328           |
| Fixed Income Managers            | 508,892                         | 1813            |
| Private Equity Managers          | 85,406                          | 1,478           |
| Real Estate Managers             | 62,671                          | 732             |
| Hedge Fund of Funds Managers     | 94,557                          | 948             |
| Global Asset Allocation Managers | 285,176                         | 2,213           |
| Real Assets                      | 32,688                          | 14              |
| Short-Term Investment Manager    | 5,161                           | -               |
| Other Investment Service Fees:   |                                 |                 |
| Custodian                        |                                 | 293             |
| Security lending                 |                                 | 73              |
| Investment consultant            |                                 | 210             |
| Total                            | <u>\$1,788,791</u>              | <u>\$11,452</u> |

\* "Asset Under Management" shown above in the amount of \$1,788,791 includes short-term investments of \$41,429, accrued interest and dividends receivable of \$3,002, receivables for investment sold of \$25,113 and payables of \$45,465. These items are separately reported from "Total Investments" in the Statement of Plan Net Assets.

## Supplementary Supporting Schedules Schedule of Commissions

(Year Ended June 30, 2010)

| <u>Investment Broker Firms</u>    | <u>Number of Shares Traded</u> | <u>Total Commissions</u> | <u>Commission Per Share</u> |
|-----------------------------------|--------------------------------|--------------------------|-----------------------------|
| ITG (Europe) Ltd. Dublin          | 7,465,640                      | \$ 78,912                | 0.01                        |
| JP Morgan Clearing Corp, New York | 693,497                        | 24,603                   | 0.04                        |
| Barclays Capital LE, Jersey City  | 562,526                        | 20,583                   | 0.04                        |
| BNY Convergenx, New York          | 629,700                        | 18,070                   | 0.03                        |
| Credit Suisse, New York           | 1,467,365                      | 15,550                   | 0.01                        |
| Liquidnet Inc. Brooklyn           | 517,048                        | 13,121                   | 0.03                        |
| Miscellaneous (Under \$10,000)    | <u>11,614,008</u>              | <u>246,334</u>           | 0.03                        |
| Total                             | <u>22,949,784</u>              | <u>\$417,173</u>         |                             |

# INVESTMENT SECTION

## Investment Summary

(June 30, 2010)

| TYPE OF INVESTMENTS                   | FAIR<br>VALUE   | % of FAIR<br>VALUE |
|---------------------------------------|-----------------|--------------------|
| Fixed Income:                         |                 |                    |
| U.S. Government & Agencies Securities | \$165,541,960   | 9.4%               |
| Municipals                            | 1,254,795       | 0.1                |
| Corporate Bonds                       | 127,548,325     | 7.2                |
| Foreign Bonds                         | 28,472,741      | 1.6                |
| Bond Mutual Funds                     | 177,204,936     | 10.0               |
| Total Fixed Income                    | \$500,022,757   | 28.3%              |
| Common Stock:                         |                 |                    |
| Basic Industries                      | \$18,223,138    | 1.0%               |
| Consumer Durable Goods                | 6,145,520       | 0.3                |
| Consumer Non-Durables                 | 14,558,572      | 0.8                |
| Consumer Services                     | 20,904,552      | 1.2                |
| Energy                                | 18,279,945      | 1.0                |
| Financial Services                    | 29,059,721      | 1.6                |
| Health Care                           | 26,913,713      | 1.5                |
| Media                                 | 8,323,581       | 0.5                |
| Technology                            | 27,491,259      | 1.6                |
| Transportation                        | 5,211,741       | 0.3                |
| Utilities                             | 4,201,485       | 0.2                |
| General Business                      | 181,991,096     | 10.3               |
| Total Common Stock                    | \$361,304,324   | 20.5%              |
| Other Investments:                    |                 |                    |
| Stock Mutual Funds                    | \$342,893,597   | 19.4%              |
| Real Estate Equity Funds              | 62,671,352      | 3.6                |
| Hedge Funds                           | 94,549,761      | 5.4                |
| Private Equity Funds                  | 85,405,958      | 4.8                |
| Real Assets                           | 32,687,677      | 1.9                |
| Global Asset Allocation Funds         | 285,175,543     | 16.2               |
| Total Other Investments               | \$903,383,888   | 51.2%              |
| Total Investments at fair value       | \$1,764,710,969 | 100.0%             |

***ACTUARIAL  
SECTION***

Actuary's Certification Letter



A Xerox Company

June 1, 2010

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

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, 2009, 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, 2009 valuation determine the contribution appropriation for the fiscal year ending June 30, 2011.

The financing objective of the System is 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.

**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. Due to time constraints, the impact of the plan changes noted in the report were measured using member data as of the prior valuation date (June 30, 2008). We believe that this is appropriate given the stability of the member population and the nature of the changes made.

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 five-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 five years, as adopted for valuation purposes effective June 30, 2009. An interest rate of 7<sup>7</sup>/<sub>8</sub>% was used in the valuation, as adopted for valuation purposes effective June 30, 1993.

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# — ACTUARIAL SECTION —

Board of Trustees  
June 1, 2010  
Page 2

To help stabilize the County contribution, the 14% corridor around the market value was removed from the calculation of the actuarial value of assets effective June 30, 2009. Also, based on the County's future expectations, the assumed salary increase rates were reduced for all active members.

Included in the valuation report is a schedule that presents an outline of the actuarial assumptions and methods used to prepare the actuarial valuation results. The most recent study of the plan's experience, used in developing the current actuarial assumptions, was based on a period from July 2001 to June 2006. In our opinion, the actuarial assumptions used in the valuation are, in the aggregate, reasonable.

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

### **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, Financial and Statistical Sections of the Comprehensive Annual Financial Report.

This report was prepared by Lawrence Lin under the supervision of Timothy J. Abramic and reviewed by David L. Driscoll. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and Actuarial Standards of Practice. Messrs. Abramic and Driscoll are members of the American Academy of Actuaries and meet the Academy's Qualification Standards to render the actuarial opinion contained herein. They are available to answer questions concerning this report.

Respectfully submitted,



David L. Driscoll, F.S.A., E.A., M.A.A.A.  
Principal



Timothy J. Abramic, E.A., M.A.A.A.  
Director, Retirement Consulting



Lawrence (Yen-An) Lin, A.S.A.  
Consultant, Retirement

DD/TJA/LL:pl

BUCK CONSULTANTS

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods

### ASSUMPTIONS

**Interest Rate:**  $7\frac{7}{8}\%$  per annum, compounded annually.

**Inflation:** 3.0% per annum.

**Salary Increase:** Representative values for fiscal years beginning July 1, 2012 are as follows (adopted as of June 30, 2009 effective for the fiscal 2011 contribution):

| Age | Annual Rates of Salary Increase                                    |                                     |
|-----|--|-------------------------------------|
|     | General Employees,<br>Correctional Officers<br>and Deputy Sheriffs | Police Officers and<br>Firefighters |
| 25  | 6.40%  | 6.55%                               |
| 30  | 4.90   | 5.05                                |
| 35  | 3.90   | 4.05                                |
| 40  | 3.40   | 3.55                                |
| 45  | 2.90   | 3.05                                |
| 50  | 2.40%  | 2.55%                               |
| 55  | 1.90   | 2.30                                |
| 60  | 1.90   | 2.30                                |
| 65  | 1.90   | 2.30                                |

Salary increase rates at all ages for the fiscal years ending June 30, 2010 and June 30, 2011 are 3% for Police and 2.5% for all other groups. Salary increase rates for the year ending June 30, 2012 at all ages are 2% for Police and 1.5% for all other groups.

The effect of these assumptions is illustrated by the following examples: When used in the valuation process, these assumptions produce an effective annual average increase of 4.0% over a 27-year career for a Policeman hired at age 25, and 3.0% over a 30-year career for a General Employee hired at age 30.

**Future Expenses:** Effective June 30, 2003, the assumed interest rate is gross of the anticipated future administrative expenses of the fund. All administrative and operating expenses of the ERS are included in the normal cost effective with the June 30, 2001 actuarial valuation.

**Loading or Contingency Reserves:** None

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods (Continued)

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

| Age   | Hired Before 7/01/2007                     |   |   |            |            |          |         |            |
|---|--|---|---|------------|------------|----------|---------|------------|
|   | Withdrawal                                 |   |   | Disability |            | Death    |         |            |
|   | Refund<br>Before 10<br>Years of<br>Service | Refund<br>After 10<br>Years of<br>Service | Termination<br>Benefit<br>After 10<br>Years of<br>Service | Ordinary   | Accidental | Ordinary |         | Accidental |
|   |  |   |   |            |            | Males    | Females |            |
| <b>General Employees, Correctional Officers and Deputy Sheriffs</b> |  |   |   |            |            |          |         |            |
| 20  | 17.406%                                    |   |   | 0.036%     | 0.009%     | 0.056%   | 0.015%  | 0.002%     |
| 25  | 13.500                                     |   |   | 0.051      | 0.009      | 0.054    | 0.014   | 0.001      |
| 30  | 10.350                                     | 1.087%                                    | 1.200%  | 0.087      | 0.019      | 0.052    | 0.022   | 0.001      |
| 35  | 9.900                                      | 0.810                                     | 1.200   | 0.145      | 0.019      | 0.061    | 0.038   | 0.001      |
| 40  | 9.900                                      | 0.773                                     | 1.200   | 0.253      | 0.028      | 0.082    | 0.050   | 0.002      |
| 45  | 9.900                                      | 0.735                                     | 1.350   | 0.361      | 0.047      | 0.121    | 0.079   | 0.003      |
| 50  | 7.200                                      | 0.697                                     | 1.500   | 0.506      | 0.056      | 0.188    | 0.124   | 0.006      |
| 55  | 5.400                                      | 0.660                                     | 1.500   | 0.615      | 0.066      | 0.310    | 0.180   | 0.009      |
| 60  | 4.500                                      | 0.630                                     | 1.500   | 0.615      | 0.084      | 0.588    | 0.288   | 0.015      |
| 64  | 3.780                                      | 0.630                                     | 1.500   | 0.615      | 0.084      | 0.994    | 0.529   | 0.022      |
| 65  |  |   |   | 0.615      | 0.084      | 1.127    | 0.623   | 0.024      |
| 69  |  |   |   | 0.615      | 0.084      | 1.787    | 1.111   | 0.035      |
| <b>Police Officers</b>  |  |   |   |            |            |          |         |            |
| 20  | 5.625%                                     |   |   | 0.023%     | 0.045%     | 0.028%   | 0.008%  | 0.008%     |
| 25  | 2.925                                      |   |   | 0.023      | 0.056      | 0.027    | 0.007   | 0.012      |
| 30  | 2.700                                      | 0.750%                                    | 1.030%  | 0.028      | 0.068      | 0.026    | 0.011   | 0.016      |
| 35  | 1.800                                      | 0.500                                     | 0.630   | 0.106      | 0.096      | 0.031    | 0.010   | 0.024      |
| 40  | 1.350                                      | 0.300                                     | 0.390   | 0.106      | 0.164      | 0.041    | 0.025   | 0.036      |
| 45  | 1.350                                      | 0.300                                     | 0.220   | 0.106      | 0.310      | 0.060    | 0.040   | 0.052      |
| 50  | 0.900                                      | 0.300                                     | 0.120   | 0.149      | 0.570      | 0.094    | 0.062   | 0.084      |
| 55  | 0.562                                      | 0.300                                     | 0.030   | 0.553      | 1.015      | 0.155    | 0.090   | 0.140      |
| 59  |  |   |   | 0.553      | 1.636      | 0.257    | 0.128   | 0.240      |
| 60  |  |   |   | 0.553      | 1.636      | 0.294    | 0.144   | 0.272      |
| 64  |  |   |   | 0.553      | 1.636      | 0.497    | 0.265   | 0.400      |
| <b>Firefighters</b>   |  |   |   |            |            |          |         |            |
| 20  | 5.000%                                     |   |   | 0.023%     | 0.011%     | 0.028%   | 0.008%  | 0.008%     |
| 25  | 2.600                                      |   |   | 0.023      | 0.014      | 0.027    | 0.007   | 0.012      |
| 30  | 2.400                                      | 0.750%                                    | 1.030%  | 0.028      | 0.017      | 0.026    | 0.011   | 0.016      |
| 35  | 1.600                                      | 0.500                                     | 0.630   | 0.106      | 0.024      | 0.031    | 0.010   | 0.024      |
| 40  | 1.200                                      | 0.300                                     | 0.390   | 0.106      | 0.033      | 0.041    | 0.025   | 0.036      |
| 45  | 1.200                                      | 0.300                                     | 0.220   | 0.106      | 0.062      | 0.060    | 0.040   | 0.052      |
| 50  | 0.800                                      | 0.300                                     | 0.120   | 0.149      | 0.115      | 0.094    | 0.062   | 0.084      |
| 55  | 0.500                                      | 0.300                                     | 0.030   | 0.553      | 0.204      | 0.155    | 0.090   | 0.140      |
| 59  | 0.100                                      | 0.300                                     | 0.010   | 0.553      | 0.229      | 0.257    | 0.128   | 0.240      |
| 60  |  |   |   | 0.553      | 0.229      | 0.294    | 0.144   | 0.272      |
| 64  |  |   |   | 0.553      | 0.229      | 0.497    | 0.265   | 0.400      |

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods (Continued)

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

| Age   | Hired After 6/30/2007                      |   |   |            |            |          |         |            |
|---|--|---|---|------------|------------|----------|---------|------------|
|   | Withdrawal                                 |   |   | Disability |            | Death    |         |            |
|   | Refund<br>Before 10<br>Years of<br>Service | Refund<br>After 10<br>Years of<br>Service | Termination<br>Benefit<br>After 10<br>Years of<br>Service | Ordinary   | Accidental | Ordinary |         | Accidental |
|   |  |   |   |            |            | Males    | Females |            |
| <b>General Employees, Correctional Officers and Deputy Sheriffs</b> |  |   |   |            |            |          |         |            |
| 20  | 14.505%                                    |   |   | 0.043%     | 0.013%     | 0.056%   | 0.015%  | 0.002%     |
| 25  | 11.250                                     |   |   | 0.059      | 0.013      | 0.054    | 0.014   | 0.001      |
| 30  | 8.625                                      | 1.688%                                    | 0.600%  | 0.102      | 0.025      | 0.052    | 0.022   | 0.001      |
| 35  | 8.250                                      | 1.613                                     | 0.600   | 0.170      | 0.025      | 0.061    | 0.038   | 0.001      |
| 40  | 8.250                                      | 1.538                                     | 0.600   | 0.298      | 0.038      | 0.082    | 0.050   | 0.002      |
| 45  | 8.250                                      | 1.462                                     | 0.675   | 0.425      | 0.062      | 0.121    | 0.079   | 0.003      |
| 50  | 6.000                                      | 1.388                                     | 0.750   | 0.595      | 0.075      | 0.188    | 0.124   | 0.006      |
| 55  | 4.500                                      | 1.313                                     | 0.750   | 0.723      | 0.088      | 0.310    | 0.180   | 0.009      |
| 60  | 3.750                                      | 1.237                                     | 0.750   | 0.723      | 0.112      | 0.588    | 0.288   | 0.015      |
| 64  | 3.150                                      | 1.178                                     | 0.750   | 0.723      | 0.112      | 0.994    | 0.529   | 0.022      |
| 65  | 3.000                                      | 1.162                                     | 0.750   | 0.723      | 0.112      | 1.127    | 0.623   | 0.024      |
| 69  |  |   |   | 0.723      | 0.112      | 1.787    | 1.111   | 0.035      |
| <b>Police Officers</b>  |  |   |   |            |            |          |         |            |
| 20  | 3.750%                                     |   |   | 0.047%     | 0.060%     | 0.056%   | 0.015%  | 0.008%     |
| 25  | 1.950                                      |   |   | 0.047      | 0.075      | 0.056    | 0.014   | 0.012      |
| 30  | 1.800                                      | 0.750%                                    | 0.515%  | 0.056      | 0.090      | 0.052    | 0.022   | 0.016      |
| 35  | 1.200                                      | 0.500                                     | 0.315   | 0.213      | 0.128      | 0.061    | 0.038   | 0.024      |
| 40  | 0.900                                      | 0.300                                     | 0.195   | 0.213      | 0.218      | 0.082    | 0.050   | 0.036      |
| 45  | 0.900                                      | 0.300                                     | 0.110   | 0.213      | 0.412      | 0.121    | 0.079   | 0.052      |
| 50  | 0.600                                      | 0.300                                     | 0.060   | 0.298      | 0.758      | 0.188    | 0.124   | 0.084      |
| 55  | 0.375                                      | 0.300                                     | 0.015   | 1.105      | 1.350      | 0.310    | 0.180   | 0.140      |
| 59  | 0.075                                      | 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      |
| <b>Firefighters</b>   |  |   |   |            |            |          |         |            |
| 20  | 2.500%                                     |   |   | 0.047%     | 0.045%     | 0.056%   | 0.015%  | 0.008%     |
| 25  | 1.300                                      |   |   | 0.047      | 0.056      | 0.056    | 0.014   | 0.012      |
| 30  | 1.200                                      | 0.750%                                    | 0.515%  | 0.056      | 0.068      | 0.052    | 0.022   | 0.016      |
| 35  | 0.800                                      | 0.500                                     | 0.315   | 0.213      | 0.095      | 0.061    | 0.038   | 0.024      |
| 40  | 0.600                                      | 0.300                                     | 0.195   | 0.213      | 0.131      | 0.082    | 0.050   | 0.036      |
| 45  | 0.600                                      | 0.300                                     | 0.110   | 0.213      | 0.247      | 0.121    | 0.079   | 0.052      |
| 50  | 0.400                                      | 0.300                                     | 0.060   | 0.298      | 0.454      | 0.188    | 0.124   | 0.084      |
| 55  | 0.250                                      | 0.300                                     | 0.015   | 1.105      | 0.810      | 0.310    | 0.180   | 0.140      |
| 59  | 0.050                                      | 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      |

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods (Continued)

**Illustrative Rates of Retirement** (adopted as of June 30, 2007):

| Age                 | General Employees                       |  |  |                                   |        |   |   |
|---------------------|---|--|--|-----------------------------------|--------|---|---|
|                     | Hired before 7/01/2007                  |  |  |                                   |        |   | Hired After 6/30/2007                               |
|                     | Early Retirement (Age 55 with 20 Years) | Normal Retirement (Age 60 and 5 Yrs, or 30 Yrs)* |  |                                   |        | DROP Retirement with 5-9 Years DROP Participation | Normal Retirement (Age 67 and 10 Years or 35 Years) |
|                     |   | Under Age 60 at June 30, 2007                    |  |                                   |        |   |   |
| 5 - 9 Years Service |   | 10 - 19 Years Service                            | 20 - 29 Years Service But Without Rule of 85 | 30 Years or Age 65** with 5 Years |        |   |   |
| 45                  |   |  |  |                                   | 8.29%  |   |   |
| 46                  |   |  |  |                                   | 8.29   |   |   |
| 47                  |   |  |  |                                   | 8.29   |   |   |
| 48                  |   |  |  |                                   | 8.29   |   |   |
| 49                  |   |  |  |                                   | 8.29   |   |   |
| 50                  |   |  |  |                                   | 8.29   |   |   |
| 51                  |   |  |  |                                   | 8.29   |   |   |
| 52                  |   |  |  |                                   | 8.29   |   |   |
| 53                  |   |  |  |                                   | 8.29   |   |   |
| 54                  |   |  |  |                                   | 8.29   |   | 11.05%  |
| 55                  | 9.262%                                  |  |  |                                   | 8.29   |   | 11.05   |
| 56                  | 2.925                                   |  |  |                                   | 8.29   |   | 11.05   |
| 57                  | 1.950                                   |  |  |                                   | 8.29   |   | 11.05   |
| 58                  | 3.120                                   |  |  |                                   | 8.29   |   | 11.05   |
| 59                  | 4.388                                   |  |  |                                   | 8.29   |   | 11.05   |
| 60                  |   | 2.00%  | 10.00%                                       | 20.00%                            | 8.29   | 5.00%   | 11.05   |
| 61                  |   | 2.00   | 10.00  | 20.00                             | 9.53   | 10.00   | 12.71   |
| 62                  |   | 2.00   | 10.00  | 20.00                             | 17.34  | 15.00   | 23.11   |
| 63                  |   | 2.00   | 10.00  | 20.00                             | 12.37  | 20.00   | 16.48   |
| 64                  |   | 2.00   | 10.00  | 20.00                             | 14.02  | 25.00   | 18.69   |
| 65                  |   |  |  |                                   | 22.73  | 30.00   | 30.29   |
| 66                  |   |  |  |                                   | 19.33  | 35.00   | 25.76   |
| 67                  |   |  |  |                                   | 18.33  | 40.00   | 24.44   |
| 68                  |   |  |  |                                   | 17.34  | 45.00   | 23.11   |
| 69                  |   |  |  |                                   | 16.51  | 50.00   | 22.01   |
| 70                  |   |  |  |                                   | 100.00 |   | 100.00  |

\* Members not meeting DROP entry requirements by age 65 are assumed to retire on normal service retirement at the rates shown above. Members who meet DROP entry requirements by age 65 are assumed to (a) retire on service retirement at 75% of the normal retirement rates shown above prior to entering the DROP; (b) enter the DROP as soon as they are eligible; (c) retire normally (5%) or with DROP benefits (95%) at the DROP retirement rates shown after five years of DROP participation. The DROP retirement rate becomes 100% upon completion of ten years of DROP participation, or attainment of age 70, whichever occurs first.

\*\* Substitute 60 for 65 if the member was age 60 or older on or before 6/30/07.

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods (Continued)

| Age | Correctional Officers and Deputy Sheriffs |                                  |  |   |   |
|-----|---|----------------------------------|--|---|---|
|     | Hired Before 7/01/2007*                   |                                  |  |   | Hired After<br>6/30/2007                              |
|     | Normal<br>Retirement<br>(20 Years)        | DROP<br>Retirement<br>(27 Years) | Age 60<br>with 5 to<br>10 Years<br>of<br>Service | Age 60<br>with 10 to<br>20 Years<br>of<br>Service | Retirement<br>(Age 67 and<br>10 Years or<br>25 Years) |
| 40  | 3.393%                                    |                                  |  |   |   |
| 41  | 3.393                                     |                                  |  |   |   |
| 42  | 3.393                                     |                                  |  |   |   |
| 43  | 3.393                                     |                                  |  |   |   |
| 44  | 3.393                                     |                                  |  |   |   |
| 45  | 3.393                                     | 17.192%                          |  |   | 14.95%  |
| 46  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 47  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 48  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 49  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 50  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 51  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 52  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 53  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 54  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 55  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 56  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 57  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 58  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 59  | 3.393                                     | 17.192                           |  |   | 14.95   |
| 60  | 3.393                                     | 17.192                           | 4.00%  | 10.00%  | 14.95%  |
| 61  | 5.968                                     | 19.769                           | 4.00   | 12.00   | 17.19   |
| 62  | 22.166                                    | 35.966                           | 4.00   | 14.00   | 31.27   |
| 63  | 11.845                                    | 25.645                           | 4.00   | 16.00   | 22.30   |
| 64  | 15.283                                    | 29.083                           | 4.00   | 18.00   | 25.29   |
| 65  | 27.588                                    | 41.388                           | 4.00   | 20.00   | 40.99   |
| 66  | 20.539                                    | 34.339                           | 4.00   | 22.00   | 34.86   |
| 67  | 18.469                                    | 32.269                           | 4.00   | 24.00   | 33.06   |
| 68  | 16.410                                    | 30.210                           | 4.00   | 26.00   | 31.27   |
| 69  | 14.685                                    | 28.486                           | 4.00   | 28.00   | 29.77   |
| 70  | 100.000                                   | 100.000                          |  |   | 100.00  |

\* Members meeting the service requirement for the DROP are assumed to retire at 75% of the normal retirement rates shown above prior to eligibility for the benefit. Members not qualifying for the DROP are assumed to retire at the normal retirement rates shown above. An additional 20% is applied at the point a member is first eligible to retire under the DROP. Also, an additional 25% is applied at the point 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 DROP.

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods (Continued)

| Age | Police                             |   |   |   |
|-----|------------------------------------|---|---|---|
|     | Hired Before 7/01/2007*            |   |   | Hired After<br>6/30/2007                              |
|     | Normal<br>Retirement<br>(20 Years) | Age 55<br>with 5 to<br>10 Years of<br>Service | Age 55<br>with 10 to<br>20 Years<br>of<br>Service | Retirement<br>(Age 60 and<br>10 Years or 25<br>Years) |
| 40  | 5.16%                              |   |   |   |
| 41  | 5.21                               |   |   |   |
| 42  | 5.26                               |   |   |   |
| 43  | 5.31                               |   |   |   |
| 44  | 5.34                               |   |   |   |
| 45  | 5.41                               |   |   | 9.41%   |
| 46  | 5.47                               |   |   | 9.47  |
| 47  | 5.56                               |   |   | 9.56  |
| 48  | 5.67                               |   |   | 9.67  |
| 49  | 5.78                               |   |   | 9.78  |
| 50  | 5.91                               |   |   | 9.91  |
| 51  | 6.05                               |   |   | 10.05   |
| 52  | 6.23                               |   |   | 10.23   |
| 53  | 6.44                               |   |   | 10.44   |
| 54  | 6.69                               |   |   | 10.69   |
| 55  | 15.30                              | 3.00%   | 25.00%  | 19.30   |
| 56  | 13.79                              | 3.00  | 30.00   | 17.79   |
| 57  | 5.86                               | 3.00  | 35.00   | 9.86  |
| 58  | 6.07                               | 3.00  | 40.00   | 10.07   |
| 59  | 6.41                               | 3.00  | 45.00   | 10.41   |
| 60  | 95.00                              | 3.00  | 50.00   | 95.00   |
| 61  | 40.00                              | 3.00  | 55.00   | 40.00   |
| 62  | 75.00                              | 3.00  | 60.00   | 75.00   |
| 63  | 50.00                              | 3.00  | 65.00   | 50.00   |
| 64  | 50.00                              | 3.00  | 70.00   | 50.00   |
| 65  | 100.00                             |   |   | 100.00  |

\* Members meeting the service requirement for the DROP are assumed to retire at 75% of the normal retirement rates shown above prior to eligibility for the benefit. Members not qualifying for the DROP are assumed to retire at the normal retirement rates shown above. An additional 10% is applied at the point a member is first eligible to retire under the DROP. Also, an additional 10% is applied at the point 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 DROP.

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods (Continued)

| Age | Fire   |   |   |   |   |
|-----|--|---|---|---|---|
|     | Hired Before 7/01/2007*                          |   |   |   | Hired After<br>6/30/2007                              |
|     | Normal<br>Retirement<br>(25 years<br>of service) | Age 60 with<br>5 to 10<br>Years of<br>Service | Age 60<br>with 10 to<br>20 Years<br>of<br>Service | Age 50<br>with 20 to<br>25 Years<br>of<br>Service | Retirement<br>(Age 60 and<br>10 Years or<br>30 Years) |
| 44  | 12.00%   |   |   |   |   |
| 45  | 12.00  |   |   |   |   |
| 46  | 12.00  |   |   |   |   |
| 47  | 12.00  |   |   |   |   |
| 48  | 12.00  |   |   |   |   |
| 49  | 12.00  |   |   |   | 12.00%  |
| 50  | 10.25  |   |   | 2.00%   | 10.25   |
| 51  | 10.40  |   |   | 2.00  | 10.40   |
| 52  | 10.58  |   |   | 2.00  | 10.58   |
| 53  | 10.80  |   |   | 2.00  | 10.80   |
| 54  | 11.05  |   |   | 2.00  | 11.05   |
| 55  | 19.89  |   |   | 2.00  | 19.89   |
| 56  | 18.32  |   |   | 2.00  | 18.32   |
| 57  | 10.10  |   |   | 2.00  | 10.10   |
| 58  | 10.31  |   |   | 2.00  | 10.31   |
| 59  | 10.65  |   |   | 2.00  | 10.65   |
| 60  | 85.00  | 3.00%   | 25.00%  | 2.00  | 85.00   |
| 61  | 35.00  | 3.00  | 35.00   | 2.00  | 35.00   |
| 62  | 60.00  | 3.00  | 45.00   | 2.00  | 60.00   |
| 63  | 40.00  | 3.00  | 55.00   | 2.00  | 40.00   |
| 64  | 50.00  | 3.00  | 65.00   | 2.00  | 50.00   |
| 65  | 100.00   |   |   |   | 100.00  |

\* Members meeting the service requirement for the DROP are assumed to retire at 75% of the normal retirement rates shown above prior to eligibility for the benefit. Members not qualifying for the DROP are assumed to retire at the normal retirement rates shown above. An additional 10% is applied at the point a member is first eligible to retire under the DROP. Also, an additional 10% is applied at the point a member first reaches the 25-year service point due to the added health care subsidy. 100% of eligible members are assumed to elect the DROP.

# — ACTUARIAL SECTION —

## Summary of Actuarial Assumptions and Methods (Continued)

**Death After Retirement:** The 1995 George B. Buck Mortality Table with ages set forward one year was used for service retirements and dependent beneficiaries. Special mortality tables are used for disability retirements. Illustrative rates are as follows (adopted as of June 30, 2007):

| Age | Annual Rates of Mortality Among: |         |                                    |         |                         |
|-----|----------------------------------|---------|------------------------------------|---------|-------------------------|
|     | Service Pensioners               |         | Disability Pensioners              |         |                         |
|     | All Members                      |         | Other than Police and Firefighters |         | Police and Firefighters |
|     | Males                            | Females | Males                              | Females |                         |
| 40  | 0.102%                           | 0.062%  | 2.322%                             | 1.732%  | 3.029%                  |
| 45  | 0.151                            | 0.099   | 2.444                              | 1.842   | 2.114                   |
| 50  | 0.235                            | 0.155   | 2.635                              | 2.020   | 1.947                   |
| 55  | 0.387                            | 0.226   | 2.939                              | 2.299   | 2.109                   |
| 60  | 0.735                            | 0.360   | 3.417                              | 2.740   | 2.437                   |
| 65  | 1.408                            | 0.779   | 4.166                              | 3.431   | 2.964                   |
| 70  | 2.485                            | 1.562   | 5.340                              | 4.515   | 3.781                   |
| 75  | 4.176                            | 2.566   | 7.157                              | 6.193   | 5.055                   |
| 80  | 6.934                            | 4.195   | 9.920                              | 8.770   | 7.007                   |

**Marital Status:** For firefighters and police officers, 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 three 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  | ½ year |

# — ACTUARIAL SECTION —

## 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. (Adopted as of June 30, 2008)

**Asset Valuation Method:** The valuation assets are determined as the market value less (1) 80% of the gain/(loss) during the preceding year, (2) 60% of the gain/(loss) during the second preceding year, and (3) 40% of the gain/(loss) during the third preceding year and (4) 20% of the gain/(loss) during the fourth preceding year. 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, 2009)

**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, 2009 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. Due to time constraints, the impact of the 2009 plan changes was measured using data as of the prior valuation (June 30, 2008). We believe that this appropriate due to the stability of the member population and the nature of the changes made.

# — ACTUARIAL SECTION —

## 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 |
|-------------------------|--------------------------|-------------------|----------------|-----------------------------|----------------|
| 2000                    | 5,938                    | \$183,520,218     | \$30,906       | 7.5%                        | 3.7%           |
| 2001                    | 5,999                    | 188,253,900       | 31,381         | 1.5                         | 3.2            |
| 2002                    | 6,161                    | 203,036,384       | 32,955         | 5.0                         | 1.1            |
| 2003                    | 6,089                    | 208,335,050       | 34,215         | 3.8                         | 2.1            |
| 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)          |

### POLICE OFFICERS

| Valuation as of June 30 | Number of Active members | Valuation Payroll | Average Salary | Percent Increase (Decrease) | CPI % Increase |
|-------------------------|--------------------------|-------------------|----------------|-----------------------------|----------------|
| 2000                    | 1,777                    | \$74,594,530      | \$41,978       | 9.8%                        | 3.7%           |
| 2001                    | 1,799                    | 81,739,776        | 45,436         | 8.2                         | 3.2            |
| 2002                    | 1,774                    | 91,225,162        | 51,423         | 13.2                        | 1.1            |
| 2003                    | 1,761                    | 90,956,535        | 51,651         | 0.4                         | 2.1            |
| 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)          |

# — ACTUARIAL SECTION —

## 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 |
|-------------------------|--------------------------|-------------------|----------------|-----------------------------|----------------|
| 2000                    | 987                      | \$42,753,238      | \$43,316       | 5.1%                        | 3.7%           |
| 2001                    | 1,004                    | 45,716,523        | 45,534         | 5.1                         | 3.2            |
| 2002                    | 984                      | 47,859,370        | 48,638         | 6.8                         | 1.1            |
| 2003                    | 1,007                    | 51,149,350        | 50,794         | 4.4                         | 2.1            |
| 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)          |

### CORRECTIONAL OFFICERS AND DEPUTY SHERIFFS

| Valuation as of June 30 | Number of Active members | Valuation Payroll | Average Salary | Percent Increase (Decrease) | CPI % Increase |
|-------------------------|--------------------------|-------------------|----------------|-----------------------------|----------------|
| 2000                    | 229                      | \$7,983,804       | \$34,864       | 10.5%                       | 3.7%           |
| 2001                    | 226                      | 7,981,113         | 35,315         | 1.3                         | 3.2            |
| 2002                    | 235                      | 8,742,297         | 37,201         | 5.3                         | 1.1            |
| 2003                    | 284                      | 10,572,203        | 37,226         | 0.1                         | 2.1            |
| 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)          |

# — ACTUARIAL SECTION —

## 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 |
|-------------------------|--------------------------|-------------------|----------------|-----------------------------|----------------|
| 2000                    | 8,931                    | \$308,851,790     | \$34,582       | 7.7%                        | 3.7%           |
| 2001                    | 9,028                    | 323,691,312       | 35,854         | 3.7                         | 3.2            |
| 2002                    | 9,154                    | 350,863,213       | 38,329         | 6.9                         | 1.1            |
| 2003                    | 9,141                    | 361,013,138       | 39,494         | 3.0                         | 2.1            |
| 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)          |

## 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 |                                       |                           |
| 2000                    | 291            | \$6,687,014        | 159                | \$1,536,944       | 5,455               | \$84,496,862      | 6.5%                                  | \$15,490                  |
| 2001                    | 280            | 7,015,666          | 178                | 1,989,066         | 5,557               | 89,523,462        | 5.9                                   | 16,110                    |
| 2002                    | 307            | 7,364,669          | 208                | 1,479,395         | 5,656               | 95,408,736        | 6.6                                   | 16,869                    |
| 2003                    | 292            | 7,819,671          | 179                | 2,238,672         | 5,769               | 100,989,735       | 5.8                                   | 17,506                    |
| 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                    |

\*Cost of Living Increases included here.

# — ACTUARIAL SECTION —

## 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:

| Valuation<br>as of<br>June 30 | Accrued Liability for:                  |   |   | Actuarial<br>Value of<br>Assets | Portion of Accrued Liability Covered by<br>Actuarial Value of Assets |        |        |
|-------------------------------|---|---|---|---------------------------------|--|--------|--------|
|                               | (A)<br>Active<br>Member<br>Contribution | (B)<br>Retirees<br>and<br>Beneficiaries | (C)<br>Active<br>Member<br>Employer<br>Financed |                                 | (A)  | (B)    | (C)    |
| 2000 <sup>(1)</sup>           | \$230,386,737                           | \$844,563,160                           | \$436,594,314                                   | \$1,689,860,650                 | 100.0%   | 100.0% | 100.0% |
| 2001 <sup>(2)</sup>           | 247,121,190                             | 888,237,904                             | 481,229,389                                     | 1,744,066,828                   | 100.0  | 100.0  | 100.0  |
| 2002                          | 267,367,396                             | 911,599,906                             | 545,916,909                                     | 1,764,776,154                   | 100.0  | 100.0  | 100.0  |
| 2003 <sup>(3)</sup>           | 286,223,066                             | 947,448,642                             | 596,912,599                                     | 1,740,713,074                   | 100.0  | 100.0  | 84.9   |
| 2004 <sup>(4)</sup>           | 309,108,608                             | 969,870,802                             | 645,563,619                                     | 1,803,810,968                   | 100.0  | 100.0  | 81.3   |
| 2005 <sup>(5)</sup>           | 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 <sup>(6)</sup>           | 363,778,826                             | 1,247,373,485                           | 678,300,211                                     | 2,101,023,411                   | 100.0  | 100.0  | 72.2   |
| 2008 <sup>(7)</sup>           | 391,743,335                             | 1,307,885,347                           | 791,713,328                                     | 2,191,623,378                   | 100.0  | 100.0  | 62.1   |
| 2009 <sup>(8)</sup>           | 417,514,605                             | 1,359,000,212                           | 823,155,619                                     | 2,143,616,137                   | 100.0  | 100.0  | 44.6   |

- (1) Change in benefits for Deputy Sheriffs. The actuarial asset valuation method was changed from a 4-year to a 5-year moving average with a 14% corridor on the market value of assets.
- (2) Change in benefits and retirement rates for Police and Firefighters.
- (3) Assumption changes recommended in 2001 experience study were adopted, amortization period was changed to 25 years, Police and Fire DROPs were added and Fire Joint & 50 eligibility was changed to 25 years.
- (4) Asset method change: difference between expected and actual return on market value smoothed over 4 years.
- (5) Cost method change: From Entry Age Normal to Projected Unit Credit.
- (6) 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.
- (7) Amortization period was changed to 30 years.
- (8) 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 are reduced.

# — ACTUARIAL SECTION —

## Analysis of Change in Unfunded Accrued Liability As of June 30, 2009

| <i>Reconciliation of Gain (Loss) in the Unfunded Accrued Liability:</i> | Amount              |
|---|---------------------|
| 1. Unfunded Accrued Liability at June 30, 2008                          | \$299,718,632       |
| 2. Interest Charge at 7.875% to June 30, 2009                           | 23,602,842          |
| 3. Contributions Toward Unfunded Accrued Liability                      | 15,118,020          |
| 4. Plan Changes / Amendments  | (4,573,000)         |
| 5. Change in Asset Method   |                     |
| (a) Remove Corridor   | (299,171,194)       |
| (b) Change to 5- Year Smoothing   | <u>(26,952,257)</u> |
| (c) Total   | (326,123,451)       |
| 6. Change in Assumption / Salary Scale                                  | (47,025,861)        |
| 7. Expected Unfunded Accrued Liability at June 30, 2009                 | (69,518,858)        |
| (1) + (2) + (4) + (5) + (6) – (3)                                       |                     |
| 8. Actual Unfunded Accrued Liability at June 30, 2009                   | 456,054,299         |
| 9. Increase (Decrease) from Expected / Actuarial Loss                   | \$525,573,157       |
| (8) – (7)   |                     |

## Progress Toward Amortization of Unfunded Accrued Liability For the Year Ended June 30, 2009

| <b>Unfunded Accrued Liability</b>                        | Amount               | Amortization<br>Period |
|--|----------------------|------------------------|
| 1. 2008 Fresh Start Employer Base                        | \$190,188,780        | 29 Years               |
| 2. Member Base for 12 Month Average Final Compensation   | 1,875,952            | 3 Years                |
| 3. 2008 Actuarial Loss                                   | 116,138,722          | 29 Years               |
| 4. 2009 Actuarial Loss                                   | 525,573,157          | 30 Years               |
| 5. 2009 Asset Method Change / Remove Corridor            | (299,171,194)        | 30 Years               |
| 6. 2009 Asset Method Change / Change to 5-Year Smoothing | <u>(26,952,257)</u>  | 30 Years               |
| 7. 2009 Assumption Change / Salary Scale                 | <u>(47,025,861)</u>  | <u>30 Years</u>        |
| 8. 2009 Plan Changes / Amendments                        | <u>(4,573,000)</u>   | <u>30 Years</u>        |
| 9. Total   | <u>\$456,054,299</u> |                        |

# — ACTUARIAL SECTION —

## 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. 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, 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. 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 membership.

Members are designated as elected officials, general employees, firefighters and police officers. Elected officials include only the County Executive and County Council members. General employees include Baltimore County appointed officials, classified employees, correctional officers and part-time employees (employees excluded from the classified service and work less than a standard full-time work schedule). Full and part-time Revenue Authority, education, library and community college employees are also designated as general 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 is fixed. Fiscal year 2010 contribution rates range as follows:

| Classification        | Contribution Rate as a % of Covered Payroll |                                |
|-----------------------|---|--------------------------------|
|                       | Hired prior to July 1, 2007                 | Hired on or after July 1, 2007 |
| Elected officials     | 13.85%                                      | 13.85%                         |
| Department Head       | 6.61 - 10.98%                               | 9.00%                          |
| General employees     | 4.42 - 8.36%                                | 6.00%                          |
| Correctional Officers | 4.46 - 8.12%                                | 7.00%                          |
| Deputy Sheriffs       | 4.46 - 8.36%                                | 7.00%                          |
| Firefighters          | 6.46 - 8.50%                                | 7.00%                          |
| Police Officers       | 5.51 - 8.72%                                | 7.00%                          |

Interest is credited on member contributions at the rate of 5.0% per annum.

### Contribution Rate Increase:

- Contribution rates for Sworn Police Officers, Sworn Firefighters and Department Heads were negotiated to increase by 1% on July 1, 2010 and an additional 0.5% on July 1, 2011.
- Contribution rates for General Employees, Correctional Officers and Deputy Sheriffs were negotiated to increase by 0.5% on July 1, 2010 and an additional 0.5% on July 1, 2011.

# — ACTUARIAL SECTION —

## 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, general employees, elected officials and police officers 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.

### RETIREMENT ALLOWANCE DATES

#### **Normal Retirement for Service: 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 60 unless approved for continuation of service by the Board on an annual basis.

#### **Normal Retirement for Service: 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 60 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.

# — ACTUARIAL SECTION —

## 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.

**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 60 as of June 30, 2007 and attain 5 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<sup>th</sup> 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<sup>th</sup> 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 most 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 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. 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.

# — ACTUARIAL SECTION —

## 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** is granted to members as follows:

- (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.
- (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 one of seven retirement allowance options in addition to the maximum allowance. The selection of an option, excluding *Option 7*, reduces the maximum allowance as described above. 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.
- 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.

# — ACTUARIAL SECTION —

## Summary of Plan Provisions, continued

*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.

### **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 with the County as a police officer 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 an assumed accumulation of member contributions, monthly pension payments and interest earned in the DROP period. 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, is offered a 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.

### **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 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 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*.

# — ACTUARIAL SECTION —

## Summary of Plan Provisions, continued

- (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 50% 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 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  $66\frac{2}{3}\%$  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 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 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 4%. 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  $\frac{1}{4}\%$  for which there are sufficient moneys. If there are insufficient funds to finance a one percent increase, no retirement allowance increase shall be granted.

# — ACTUARIAL SECTION —

## Changes to Plan Provisions

### Effective February 1, 2010:

- County Council Bill 94-09 was enacted which caps retirement allowances for future County council members at 60% of Average Final Compensation.

### Effective April 19, 2010:

- Group 3 members (i.e. all members excluding sworn Police Officers and sworn Firefighters) 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.
- Eligibility for ordinary disability increased from 5 years to 10 years for Group 3 members.

### Effective July 1, 2010:

#### Contribution Rate Increase

- Contribution rates for Sworn Police Officers, Sworn Firefighters and Department Heads increased by 1% on July 1, 2010 and will increase an additional 0.5% on July 1, 2011.
- Contribution rates for General Employees, Correctional Officers and Deputy Sheriffs increased by 0.5% on July 1, 2010 and will increase an additional 0.5% on July 1, 2011.

#### Post-Retirement Cost-of-Living Adjustments (COLAs)

- 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 active and retired 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.

#### Disabilities and Death Benefits

- Accidental disabilities for Group 3 members are now tiered based on the degree of disability (75%, 66.67%, or 50%) in lieu of 66.67% plus accumulated contributions.
- Eligibility for ordinary death benefit increased from 1 year to 5 years for Group 3 members.
- Members who have depleted all their personal illness leave and are utilizing sick leave bank and are not in positive pay status, will not be eligible to apply for disability retirement.

#### Administrative Efficiencies / Creditable Service

- Group 3 members must purchase any eligible waived time by June 30, 2012 or forfeit the option to do so.
- Group 3 members hired on or after July 1, 2010 will not be permitted to purchase any waived time.
- Time used from sick leave bank or any other extraordinary leave time during employment is excluded from the creditable service calculation.

## — ACTUARIAL SECTION —

- The number of days an employee has contributed to the sick leave bank as a member will be counted as creditable service.
- Time spent not in service and in any type of unpaid leave of absence (e.g. FMLA) will be excluded from the creditable service calculation.
- The age of hire at which an employee may opt not to join the System has been lowered from age 59 to age 55.
- Sworn Police Officers and sworn Firefighters mandatory retirement age pending annual medical evaluations changed from age 60 to age 65.

***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 68 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 Net Assets
- Schedule of Benefit and Refund Deductions from Net Assets by Type

## *Other Information*

The schedules beginning on Page 69 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

# STATISTICAL SECTION

## Schedule of Changes in Net Assets For the Ten Years Ended June 30, (Expressed in thousands)

| Fiscal Year | ADDITIONS            |                        |                          |                                    | DEDUCTIONS       |                         |                          |                                       | Changes in Net Assets |
|-------------|----------------------|------------------------|--------------------------|------------------------------------|------------------|-------------------------|--------------------------|---------------------------------------|-----------------------|
|             | Member Contributions | Employer Contributions | Investment Income (Loss) | Total Additions to Plan Net Assets | Benefit Payments | Refunds of Contribution | Administrative Expenses* | Total Deductions from Plan Net Assets |                       |
| 2001        | 20,018               | 11,994                 | (113,522)                | (81,510)                           | 88,768           | 3,968                   | 227                      | 92,963                                | (174,473)             |
| 2002        | 21,914               | 11,175                 | (117,431)                | (84,342)                           | 94,546           | 2,261                   | 232                      | 97,039                                | (181,381)             |
| 2003        | 22,257               | 18,241                 | 75,993                   | 116,491                            | 99,663           | 2,264                   | 889                      | 102,816                               | 13,675                |
| 2004        | 22,927               | 24,617                 | 239,148                  | 286,692                            | 105,713          | 2,203                   | 871                      | 108,787                               | 177,905               |
| 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               |

\* Beginning in FY 2000, consultant fees were transferred from the County to the System. In FY 2003, all administrative expenses were transferred from the County to the System.

## Schedule of Benefit and Refund Deductions from Net Assets by Type For the Ten Years Ended June 30, (Expressed in Thousands)

| Year Ending June 30 | Age & Service Benefits |               | Disability Benefits |                  |               | Death Benefits | Total Benefits | Refunds    |        | Total Refunds |
|---------------------|------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|------------|--------|---------------|
|                     |                        |               | Retirees            |                  | Beneficiaries |                |                | Separation | Death* |               |
|                     | Retirees               | Beneficiaries | Occupational        | Non-Occupational |               |                |                |            |        |               |
| 2001                | 66,165                 | 4,421         | 13,955              | 4,011            | 169           | 47             | 88,768         | 3,927      | -      | 3,927         |
| 2002                | 70,714                 | 4,992         | 14,261              | 4,256            | 220           | 104            | 94,547         | 2,261      | -      | 2,261         |
| 2003                | 74,865                 | 4,943         | 14,645              | 4,503            | 269           | 438            | 99,663         | 2,031      | -      | 2,031         |
| 2004                | 79,880                 | 5,208         | 15,099              | 4,798            | 273           | 455            | 105,713        | 2,126      | -      | 2,126         |
| 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         |

\*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.

# STATISTICAL SECTION

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

Fiscal Year Ended June 30, 2009

| Amount of Monthly Benefit | Number of Retirees | Type of Retirement |            |            |            |            | Deferred Future Benefits |
|---------------------------|--------------------|--------------------|------------|------------|------------|------------|--------------------------|
|                           |                    | 1                  | 2          | 3          | 4          | 5          |                          |
| Deferred                  | 464                | -                  | -          | -          | -          | -          | 464                      |
| \$1 - \$300               | 539                | 413                | 113        | -          | 13         | -          | -                        |
| \$301 - \$600             | 814                | 607                | 140        | -          | 61         | 6          | -                        |
| \$601 - \$900             | 727                | 511                | 93         | 1          | 120        | 2          | -                        |
| \$901 - \$1,200           | 578                | 431                | 72         | 10         | 59         | 6          | -                        |
| \$1,201 - \$1,500         | 544                | 367                | 56         | 43         | 53         | 25         | -                        |
| \$1,501 - \$1,800         | 443                | 300                | 26         | 42         | 32         | 43         | -                        |
| \$1,801 - \$2,100         | 459                | 306                | 19         | 30         | 40         | 64         | -                        |
| \$2,101 - \$2,400         | 448                | 307                | 15         | 19         | 16         | 91         | -                        |
| \$2,401 - \$2,700         | 403                | 255                | 18         | 38         | 12         | 80         | -                        |
| \$2,701 - \$3,000         | 332                | 232                | 6          | 16         | 6          | 72         | -                        |
| Over \$3,000              | <u>1,223</u>       | <u>987</u>         | <u>34</u>  | <u>39</u>  | <u>13</u>  | <u>150</u> | -                        |
| Totals                    | <u>6,974</u>       | <u>4,716</u>       | <u>592</u> | <u>238</u> | <u>425</u> | <u>539</u> | <u>464</u>               |

**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.

# STATISTICAL SECTION

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

Fiscal Year Ended June 30, 2009

| Amount of Monthly Benefit | Number of Retirees | Option Selected |              |            |            |            |            |            |            | Deferred Future Benefits |            |
|---------------------------|--------------------|-----------------|--------------|------------|------------|------------|------------|------------|------------|--------------------------|------------|
|                           |                    | M               | 1            | 2          | 3          | 4          | 5          | 6          | 7          |                          |            |
| Deferred                  | 464                | -               | -            | -          | -          | -          | -          | -          | -          | -                        | 464        |
| \$1 - \$300               | 539                | 292             | 172          | 15         | 10         | -          | 31         | 19         | -          | -                        | -          |
| \$301 - \$600             | 814                | 370             | 298          | 30         | 19         | -          | 46         | 51         | -          | -                        | -          |
| \$601 - \$900             | 727                | 343             | 243          | 19         | 30         | -          | 32         | 60         | -          | -                        | -          |
| \$901 - \$1,200           | 578                | 244             | 205          | 19         | 25         | 4          | 37         | 44         | -          | -                        | -          |
| \$1,201 - \$1,500         | 544                | 206             | 170          | 22         | 33         | 1          | 39         | 73         | -          | -                        | -          |
| \$1,501 - \$1,800         | 443                | 194             | 113          | 13         | 30         | 10         | 33         | 50         | -          | -                        | -          |
| \$1,801 - \$2,100         | 459                | 212             | 107          | 20         | 23         | 11         | 37         | 49         | -          | -                        | -          |
| \$2,101 - \$2,400         | 448                | 213             | 104          | 18         | 14         | 19         | 34         | 46         | -          | -                        | -          |
| \$2,401 - \$2,700         | 403                | 218             | 62           | 3          | 19         | 22         | 32         | 47         | -          | -                        | -          |
| \$2,701 - \$3,000         | 332                | 164             | 53           | 9          | 12         | 24         | 26         | 44         | -          | -                        | -          |
| Over \$3,000              | <u>1,223</u>       | <u>434</u>      | <u>163</u>   | <u>18</u>  | <u>43</u>  | <u>146</u> | <u>36</u>  | <u>117</u> | <u>266</u> | <u>266</u>               | -          |
| Totals                    | <u>6,974</u>       | <u>2,890</u>    | <u>1,690</u> | <u>186</u> | <u>258</u> | <u>237</u> | <u>383</u> | <u>600</u> | <u>266</u> | <u>266</u>               | <u>464</u> |

### 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).

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

# STATISTICAL SECTION

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

| Retirement Effective Dates           | Years Creditable Service |          |          |          |          |          |
|--------------------------------------|--------------------------|----------|----------|----------|----------|----------|
|                                      | 0-10                     | 10-15    | 15-20    | 20-25    | 25-30    | 30+      |
| July 1, 2004 to June 30, 2005        |                          |          |          |          |          |          |
| Average Monthly Benefit              | \$496                    | \$649    | \$1,174  | \$1,675  | \$2,408  | \$3,330  |
| Average - Average Final Compensation | \$33,243                 | \$32,162 | \$41,323 | \$45,480 | \$53,283 | \$58,361 |
| Number of Active Retirees            | 46                       | 29       | 42       | 62       | 41       | 102      |
| July 1, 2005 to June 30, 2006        |                          |          |          |          |          |          |
| Average Monthly Benefit              | \$413                    | \$761    | \$1,393  | \$1,577  | \$2,578  | \$3,137  |
| Average - Average Final Compensation | \$31,955                 | \$38,953 | \$41,875 | \$43,996 | \$56,981 | \$56,004 |
| Number of Active Retirees            | 31                       | 29       | 22       | 45       | 37       | 78       |
| July 1, 2006 to June 30, 2007        |                          |          |          |          |          |          |
| Average Monthly Benefit              | \$359                    | \$746    | \$1,332  | \$1,887  | \$2,746  | \$3,482  |
| Average - Average Final Compensation | \$34,008                 | \$38,959 | \$47,974 | \$52,399 | \$59,949 | \$61,572 |
| Number of Active Retirees            | 34                       | 24       | 34       | 75       | 55       | 112      |
| July 1, 2007 to June 30, 2008        |                          |          |          |          |          |          |
| Average Monthly Benefit              | \$541                    | \$918    | \$1,084  | \$1,894  | \$2,719  | \$3,034  |
| Average - Average Final Compensation | \$37,342                 | \$48,597 | \$41,554 | \$53,626 | \$61,120 | \$59,733 |
| Number of Active Retirees            | 37                       | 32       | 33       | 50       | 32       | 69       |
| 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       |

# ———— STATISTICAL SECTION ————

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

| Participating<br>Government Employers | 2010                 |      |                               | 2001                 |      |                               |
|---------------------------------------|----------------------|------|-------------------------------|----------------------|------|-------------------------------|
|                                       | Covered<br>Employees | Rank | Percentage of<br>Total System | Covered<br>Employees | Rank | Percentage of<br>Total System |
| Baltimore County, Maryland            | 7,048                | 1    | 73.16%                        | 6,544                | 1    | 72.49%                        |
| <u>Certain employees of:</u>          |                      |      |                               |                      |      |                               |
| Board of Education                    | 2,350                | 2    | 24.40                         | 2,239                | 2    | 24.80                         |
| Community College                     | 138                  | 3    | 1.43                          | 151                  | 3    | 1.67                          |
| Revenue Authority                     | 57                   | 4    | 0.59                          | 65                   | 4    | 0.72                          |
| Board of Library Trustees             | 40                   | 5    | 0.42                          | 29                   | 5    | 0.32                          |
| Total                                 | <u>9,633</u>         |      | <u>100.00%</u>                | <u>9,028</u>         |      | <u>100.00%</u>                |