

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, 2008



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

**JULY 1, 2007 TO JUNE 30, 2008**

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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, 2007

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.



*Oliver S. Cox*

President

*Jeffrey R. Emer*

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 23, 2008

The Comprehensive Annual Financial Report of the Employees' Retirement System of Baltimore County, Maryland (the "System") for the year ended June 30, 2008, 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 also covered for non-occupational related death benefits. Post-retirement allowance adjustments are granted annually to members who have been retired for more than 12 months provided sufficient excess investment earnings exist.

# — INTRODUCTORY SECTION —

## Letter of Transmittal, continued

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

### ECONOMIC ENVIRONMENT

The System earned returns of (4.5%) in FY 2008 and 17.2% in FY 2007. This is the first time over the last five years that the System has failed to meet the actuarially determined target return of 7.875%. The negative return in FY 2008 was due to the increasing concerns in the housing and financial markets. For actuarial valuation purposes, returns are smoothed over a four-year period. The actuarially determined target investment return is a long-term target and significant deviations from this target can be expected. To help stabilize the County's contributions, the actuarial cost method applied is projected unit credit. The funded status decreased from 91.8% as of June 30, 2007 to 88.0% as of June 30, 2008.

### 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.

### MAJOR INITIATIVES

*Governmental Accounting Standards Board (GASB) Statement No. 50, Pension Disclosure – New Implementation*

GASB has established new reporting standards in Statement No. 50, "Pension Disclosures – an amendment of GASB Statement No. 25 and No. 27". GASB Statement No. 50 requires the disclosure of the funded status of the System and the actuarial assumptions and methods as of the latest valuation date in the notes to the financial statements. The System has implemented GASB Statement No. 50 in its June 30, 2008 financial statements.

During FY 2008, the Board replaced one large cap manager with four large cap growth managers as part of an emerging manager program, and hired two portable alpha managers and one private equity manager to further diversify the portfolio. The Board implemented these changes to better meet the System's long term risk and return objectives.

### 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.

# — INTRODUCTORY SECTION —

## Letter of Transmittal, continued

**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, and hedge fund of funds. 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, 2008, the System earned a rate of return of (4.5%). The System earned an annualized rate of return of 7.0% over the past three years, and 9.0% over the past five years.

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

**Funding.** A pension plan is considered adequately funded when sufficient assets are available to meet all expected future obligations to participants. The System funding objective is to meet long-term benefits through annual employer contributions that remain approximately level as a percentage of covered 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 thirty-four (34) investment managers to provide services to the System. The list of professionals which provide services to the System is found on pages 7 and 8. Additional information regarding investment professionals may be found in the investment section on page 40.

**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, 2007. This was the fourteenth 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.

# — INTRODUCTORY SECTION —

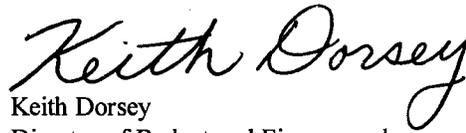
## Letter of Transmittal, continued

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.  
Effective July 1, 2007, the County Executive's designee may serve in place of the County Executive.

# — 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

Alex. Brown Investment Mgmt.  
Baltimore, Maryland

Barclays Global Investors  
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

Atlanta Life Investment Advisor  
Atlanta, Georgia

Lynmar Capital Group  
Marlton, New Jersey

### International Equity

CIBC Asset Management  
Toronto Ontario, Canada

LSV Asset Management  
Chicago, Illinois

Barclays Global Investors  
San Francisco, California

Mondrian Investment Partners  
Philadelphia, Pennsylvania

# — 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

### 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

Paul Capital Partners  
San Francisco, California

### 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

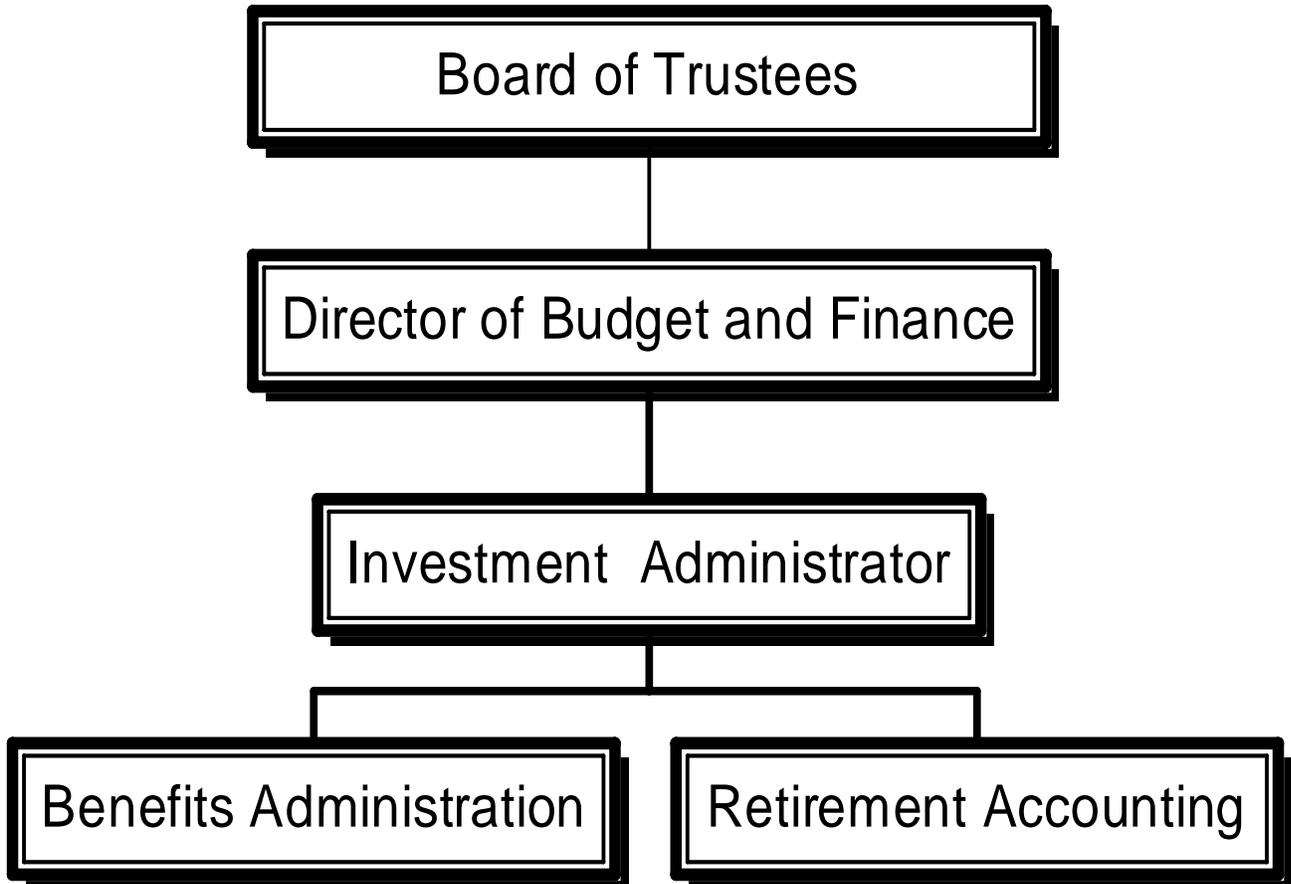
Federal Street Partners  
Stamford, Connecticut

### Global Asset Allocation

Bridgewater  
Westport, Connecticut

Mellon Capital Mgmt.  
San Francisco, California

## Administrative Organizational Chart



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***FINANCIAL  
SECTION***

# FINANCIAL SECTION

## INDEPENDENT AUDITOR'S REPORT



### Independent Auditor's Report

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

We have audited the accompanying basic financial statements of the Employees' Retirement System of Baltimore County, Maryland (the System), as of and for the years ended June 30, 2008 and 2007, 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 audits 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, 2008 and 2007, and the changes in its 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 23, 2008 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.

# — FINANCIAL SECTION —

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 these 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 required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was 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 23, 2008

# 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, 2008 and 2007. 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 assets exceeded currently payable liabilities at the close of fiscal years 2008 and 2007 by \$2.06 billion and \$2.25 billion respectively, (reported as total net assets). Total net assets are held in trust to meet future benefit payments of plan participants.
- The System's funding objective is to meet long-term benefit obligations through contributions and investment income. As of June 30, 2008 and 2007, the funded ratio was 88.0% and 91.8%, respectively. The decrease is primarily due to the loss on the actuarial accrued liability, the loss on the asset experience and the increase in the appropriation payroll.
- Total additions decreased 112.7% over the prior year from \$399,648,394 to (\$50,583,077). This decrease was due to the System incurring investment losses due to very unfavorable market conditions, as subprime debt worked its way through the financial system.
- Total deductions decreased 3.3% over the prior year from \$143,686,158 to \$138,948,904. Most of this decrease represented a reduction in benefit payments in FY 2008.

### 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 18) and the Statement of Changes in Plan Net Assets (page 19). 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

Total assets as of June 30, 2008 and 2007 were \$2,485,135,018 and \$2,646,985,275, respectively, and were comprised of cash, receivables and investments. Total assets decreased 6.1% or \$161,850,257 for FY 2008, due in part to unfavorable market conditions. FY 2008 losses were led by the poor performance of the domestic and international equity portfolio with returns of (13.2%) and 5.9% respectively. Total assets increased 12.6% or \$296,008,194 for FY 2007, due in part to favorable returns in all asset categories.

# FINANCIAL SECTION

## MANAGEMENT'S DISCUSSION AND ANALYSIS

Total liabilities that are due and payable as of June 30, 2008 and 2007 were \$424,023,793 and \$396,342,069 respectively, and were comprised of payables for investment purchases, investment expenses, and obligations under securities lending. For FY 2008 total liabilities increased 7.0% or \$27,681,724 from the prior year primarily due to an increase in payables for collateral for loaned securities. For FY 2007 total liabilities increased 11.2% or \$40,045,958 from the prior year primarily due to an increase in payables for collateral for loaned securities.

System assets exceeded its due and payable liabilities at the close of fiscal year 2008 and 2007 by \$2,061,111,225 and \$2,250,643,206, respectively. In fiscal year 2008, total net assets held in trust for pension benefits decreased 8.4% or \$189,531,981 from the previous year primarily due to unfavorable market conditions resulting from the subprime debt affecting the financial sector. In fiscal year 2007, total net assets held in trust for pension benefits increased 12.8% or \$255,962,236 from the previous year primarily due to favorable market conditions.

### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM PLAN NET ASSETS AS OF JUNE 30, 2008, 2007 AND 2006 (IN THOUSANDS)

	<u>2008</u>	<u>2007</u>	<u>2006</u>	<b>2008-2007 Total % Change</b>	<b>2007-2006 Total % Change</b>
<b>ASSETS</b>					
Cash and Short Term Investments	\$ 88,274	\$ 75,851	\$ 74,172	16.4 %	2.3 %
Collateral for Loaned Securities	246,762	193,370	163,763	27.6	18.1
Receivables	76,756	84,620	100,520	(9.3)	(15.8)
Investments	<u>2,073,343</u>	<u>2,293,144</u>	<u>2,012,522</u>	(9.6)	13.9
<b>Total Assets</b>	2,485,135	2,646,985	2,350,977	(6.1)	12.6
<b>LIABILITIES</b>					
Accounts Payable and Other Accrued Liabilities	177,262	202,972	192,533	(12.7)	5.4
Obligations Under Securities Lending	<u>246,762</u>	<u>193,370</u>	<u>163,763</u>	27.6	18.1
<b>Total Liabilities</b>	424,024	396,342	356,296	7.0	11.2
<b>Total Net Assets</b>	<u><u>\$2,061,111</u></u>	<u><u>\$2,250,643</u></u>	<u><u>\$1,994,681</u></u>	(8.4) %	12.8 %

# FINANCIAL SECTION

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

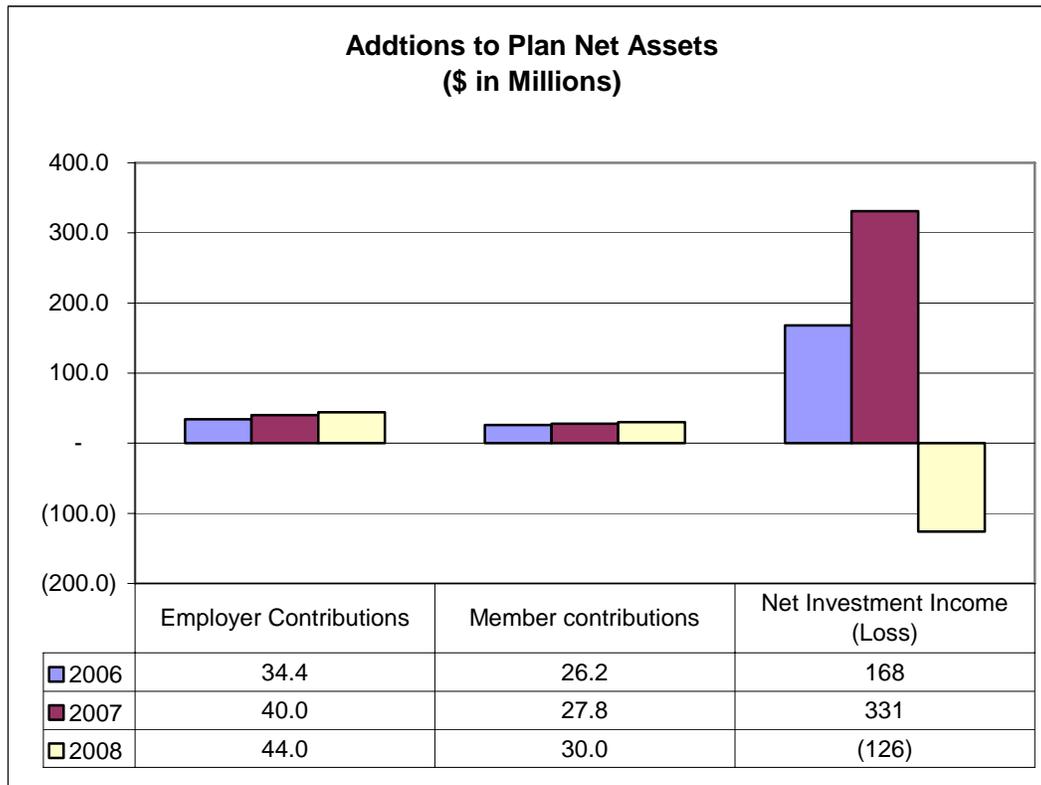
Total additions for FY 2008 decreased 112.7% or \$450,231,471 over FY 2007, due primarily to a decrease in investment income. Total additions for FY 2007 increased 75.2% or \$171,503,847 over FY 2006 due primarily to an increase in investment income. Total deductions for FY 2008 decreased 3.3% or \$4,737,254 over FY 2007 due to a decrease in benefit payments. Total deductions for FY 2007 increased 11.4% or \$14,721,837 over FY 2006 due to an increase in benefit payments.

### BALTIMORE COUNTY EMPLOYEES' RETIREMENT SYSTEM CHANGES IN PLAN NET ASSETS FOR THE FISCAL YEARS ENDED JUNE 30, 2008, 2007 AND 2006 (IN THOUSANDS)

	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>Total % Change</u>	<u>Total % Change</u>
<b>ADDITIONS</b>					
Contributions	\$ 74,130	\$ 67,838	\$ 60,606	9.3 %	11.9 %
Investment Income	(125,755)	331,413	167,112	(137.9)	98.3
Net Income From Security Lending	<u>1,042</u>	<u>397</u>	<u>426</u>	162.5	(6.8)
Total Net Investment Gain (Loss)	(124,713)	331,810	167,538	(137.6)	98.1
Total Additions	<u>(50,583)</u>	<u>399,648</u>	<u>228,144</u>	(112.7)	75.2
<b>DEDUCTIONS</b>					
Benefits	134,991	139,357	125,253	(3.1)	11.3
Refunds of Contributions	2,949	3,263	2,674	(9.6)	22.0
Administrative Expenses	<u>1,009</u>	<u>1,066</u>	<u>1,037</u>	(5.3)	2.8
Total Deductions	138,949	143,686	128,964	(3.3)	11.4
Net Increase (Decrease)	(189,532)	255,962	99,180	(174.0)	158.1
Net Assets Held in Trust for Pension Benefits					
Beginning of Year	<u>2,250,643</u>	<u>1,994,681</u>	<u>1,895,501</u>	12.8	5.2
End of Year	<u>\$2,061,111</u>	<u>\$2,250,643</u>	<u>\$1,994,681</u>	(8.4) %	12.8 %

# 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 through earnings on investments. Contributions and net investment income (loss) for fiscal years 2008 and 2007 totaled (\$50,583,077) and \$399,648,394, respectively.

Additions decreased for FY 2008 by \$450,231,471 from that of the prior year, due primarily to a decrease in the investment income. Additions increased for FY 2007 by \$171,503,847 from that of the prior year, due primarily to an increase in the investment income. Total employer contributions for FY 2008 increased over FY 2007 by \$4,102,211 or 10.2%, while member contributions increased by \$2,189,463 or 7.9%. Total employer contributions for FY 2007 increased over FY 2006 by \$5,632,252 or 16.4%, while member contributions increased by \$1,599,212 or 6.1%. The increase in employer contributions was primarily due to asset experience and other factors including increase in payroll and increase in scheduled accrued liability contributions. For the fiscal years ended 2008 and 2007, the rates of return based on the actuarial value were 7.5% and 12.5%, respectively.

For FY 2008 total investment income decreased from the previous year by \$456,523,145. The total portfolio returned (4.5%) for fiscal year ended June 30, 2008. This return under-performed the System's performance benchmark of (3.8%). The leading under-performers for FY2008 were U.S. equity and foreign equity investments returning (13.2%) and (5.9%) respectively, while private equity investments returned 18.1%, and fixed income investments 4.0% which helped to offset the overall loss to the System.

For FY 2007 total investment income increased from the previous year by \$164,272,383. The total portfolio returned 17.2% for fiscal year ended June 30, 2007. This return under-performed the System's performance benchmark of 17.6%. U.S. equity investments returned 19.8%, foreign equity investments returned 32.5%, private equity investments returned 20.7%, and fixed income investments returned 6.2%.

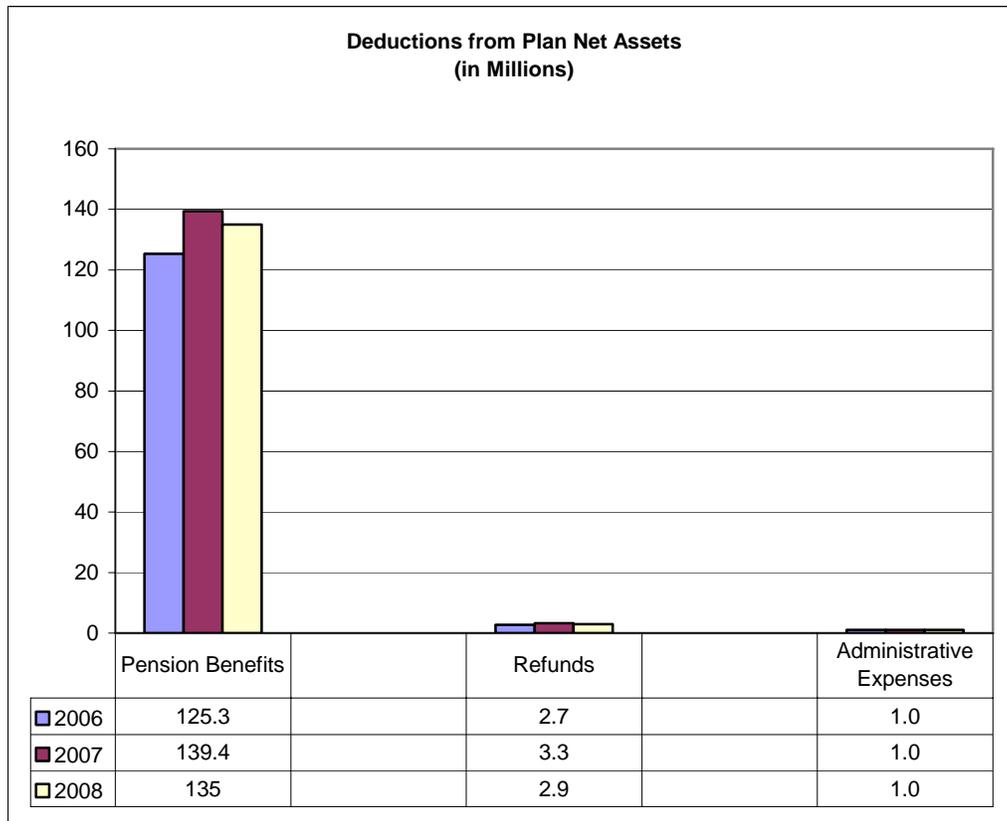
# FINANCIAL SECTION

## 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. Total deductions for FY 2008 was \$138,948,904 a decrease of 3.3% over FY 2007. Total deductions for FY 2007 was \$143,686,158 an increase of 11.4% over FY 2006.

The payment of pension benefits decreased by 3.0% or \$4,366,032 in FY 2008 from the previous year, and increased by 11.3% or \$14,104,029 in FY 2007 over FY 2006. The decrease in pension benefit expenditures in FY 2008 resulted from a decrease in drop eligible retirees. The increase in pension benefit expenditures in FY 2007 resulted from an increase in retirees. The net number of additional retirees was 49 and 229 in FY 2008 and FY 2007, respectively. Administrative expenses for FY 2008 decreased by 5.39% or \$57,493 from the previous year and increased for FY 2007 by \$29,502 or 2.9%.



### RETIREMENT SYSTEM AS A WHOLE

As a result of major concerns in the housing and financial sector, total net assets decreased by \$190 million in FY 2008. For the first time in five years, the System did not achieve its assumed rate of return of 7.875%. The System's funding ratio, as determined by the County's actuary, was 88.0% at June 30, 2008 and 91.8% at June 30, 2007. The Board continues to utilize the concepts of prudent investment management, cost controls and strategic planning.

# — FINANCIAL SECTION —

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

### OTHER SIGNIFICANT MATTERS

Since June 30, 2008, financial markets as a whole have incurred significant declines in values. As of December 23, 2008, the System's investment portfolio has incurred a significant decline in the values reported in the accompanying financial statements. However, because the values of individual investments fluctuate with market conditions, the amount of investment losses that the System will recognize in its future financial statements, if any, cannot be determined.

### 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, 2008 and 2007

	2008	2007
<i>Assets:</i>		
Cash and short term investments	\$ 88,274,264	\$ 75,850,788
Collateral for loaned securities	246,762,461	193,370,293
Receivables:		
Accrued interest and dividend income	4,914,551	8,848,081
Receivable for investments sold	71,318,882	75,029,218
Receivables - other	521,418	742,882
Total Receivables	76,754,851	84,620,181
Investments, at fair value		
U.S. Government and agency securities	191,985,868	255,276,382
Foreign bonds	16,809,083	15,959,072
Corporate bonds	180,728,804	151,437,778
Stocks	458,706,660	735,036,218
Bond mutual funds	160,715,460	180,440,507
Stock mutual funds	553,860,943	469,412,978
Real estate equity funds	115,354,208	108,750,476
Hedge funds	106,034,860	109,071,371
Private equity funds	76,779,590	58,493,900
Global Asset Allocation	212,367,966	209,265,331
Total Investments	2,073,343,442	2,293,144,013
<b>Total Assets</b>	<b>2,485,135,018</b>	<b>2,646,985,275</b>
<i>Liabilities:</i>		
Investment expenses payable	2,742,771	2,929,733
Refunds payable	432,113	288,402
Payable for investments purchased	173,977,077	199,620,699
Payable for collateral for loaned securities	246,762,461	193,370,293
Payables - other	109,371	132,942
<b>Total Liabilities</b>	<b>424,023,793</b>	<b>396,342,069</b>
<b>Net Assets Held in Trust for Pension Benefits</b> (A schedule of funding progress for the plan is presented on page 30)	<b>\$2,061,111,225</b>	<b>\$2,250,643,206</b>

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, 2008 and 2007

	2008	2007
<b>Additions</b>		
Contributions:		
Employers	\$ 44,167,525	\$ 40,065,314
Members	29,962,038	27,772,575
Total contributions	74,129,563	67,837,889
Investment Income:		
Net change in the fair value of investments	(158,309,808)	284,042,826
Interest and dividends	44,908,353	57,896,540
	(113,401,455)	341,939,366
Less: Investment expenses	(12,353,492)	(10,526,554)
Net Investment Income (Loss)	(125,754,947)	331,412,812
Net Income from Securities Lending:		
Securities Lending Income	9,594,480	9,859,180
Less:		
Borrower Rebates	(8,077,590)	(9,289,848)
Agent Fees	(474,583)	(171,639)
Net Income from Securities Lending	1,042,307	397,693
Total Net Investment Gain (Loss)	(124,712,640)	331,810,505
<b>TOTAL ADDITIONS</b>	<b>(50,583,077)</b>	<b>399,648,394</b>
<b>Deductions</b>		
Benefits	134,991,271	139,357,303
Refunds of contributions	2,948,979	3,262,708
Administrative expenses	1,008,654	1,066,147
TOTAL DEDUCTIONS	138,948,904	143,686,158
<b>Net Increase (Decrease)</b>	(189,531,981)	255,962,236
<b>Net assets held in trust for pension benefits</b>		
<b>Beginning of year</b>	2,250,643,206	1,994,680,970
<b>End of year</b>	\$2,061,111,225	\$2,250,643,206

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.

At June 30, 2008 and 2007, System membership consisted of:

	2008	2007
Retirees and beneficiaries currently receiving benefits		
General employees, correctional officers and deputy sheriffs	4,548	4,521
Firefighters and police officers	1,902	1,880
Terminated employees entitled to benefits but not yet receiving them		
General employees, correctional officers and deputy sheriffs	422	409
Firefighters and police officers	54	51
Total retirees and beneficiaries	6,926	6,861
Current employees		
Vested - Full-time employees		
General employees, correctional officers and deputy sheriffs	3,880	3,867
Firefighters and police officers	2,352	2,308
Non-vested - Full-time employees		
General employees, correctional officers and deputy sheriffs	1,771	1,698
Firefighters and police officers	561	588
Part-time employees		
Vested - General employees	570	551
Non-vested - General employees	436	459
Total active members	9,570	9,471
Non-Vested Terminations with account balances	110	100
Members on leave of absence		
General employees, correctional officers and deputy sheriffs	43	18
Firefighters and police officers	16	5
Total members on leave of absence	59	23
Grand Total	16,665	16,455

# FINANCIAL SECTION

## Notes to Financial Statements

### Note 1. continued

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

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 (Deferred Retirement Option Program), 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 can be granted to a member who can no longer perform their job due to a non-occupational related injury. A member, hired prior to July 1, 2007, must have five years of creditable service and be medically certified as incapacitated for continued performance of their duties. A member, hired on or after July 1, 2007, 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 can be granted to a member who has been incapacitated for duty as a result of an occupational related injury. The accidental disability retirement allowance is determined in accordance with Section 5-1-225 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.

# FINANCIAL SECTION

## Notes to Financial Statements

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).

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 (Hired prior to July 1, 2007)	1.82% of AFC times the number of years of creditable service for: (i) 30 years of creditable service or (ii) Age 65 with 5 years of creditable service or, (iii) Age 60 as of June 30, 2007 and attain 5 years of creditable service. 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 (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.
Firefighters	2.5% of AFC times the number of years of creditable service up to 20 years, plus 2.0% of AFC for each year in excess of 20 years, and 3.0% of AFC for each year in excess of 30 years for service years on or after July 1, 2007. 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 2.0% of AFC times the number of years of creditable service in excess of 20 years.  <u>If hired prior to July 1, 2007, with less than 20 years of creditable service at retirement:</u> 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 after June 30, 2007.  <u>If hired on or after July 1, 2007, with less than 20 years of creditable service at retirement:</u> 1.43% of AFC times the number of years of creditable service.

# FINANCIAL SECTION

## Notes to Financial Statements

<u>Employee designation</u>	<u>Allowance formula for Vested Employees</u>
Police officers	2.5% of AFC times the number of years of creditable service up to 20 years, plus 2.0% of AFC for each year of creditable service in excess of 20 years, and 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. 2.0% of AFC times the number of years of creditable service – if less than 20 years of creditable service

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, post-retirement allowance adjustments may be granted to retirees who have been retired for more than 12 months, each July 1. 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.

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

*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. Private equity funds and hedge fund of funds are valued based on information provided by the respective fund managers.

*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 either 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:

*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.

# FINANCIAL SECTION

## Notes to Financial Statements

*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, 2008 and 2007, the balances in the legally required accounts are as follows:

	<b>2008</b>	<b>2007</b>
Annuity Savings Fund	\$ 391,743,335	\$ 363,778,826
Pension Accumulation Fund	1,577,281,011	1,803,179,578
Post-Retirement Increase Fund	92,086,879	83,684,802
Net Assets Held in Trust for Pension Benefits	<u>\$2,061,111,225</u>	<u>\$2,250,643,206</u>

### 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. FY 2008 Schedule of Employers' Contributions is shown below.

Fiscal Year Ended June 30	Annual Required Contribution	Percentage Contributed
2008	\$44,167,525	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 to the payment of current and future member benefits. FY 2008 Schedule of Funding Progress is shown below in thousands.

Actuarial Valuation Date June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded (Excess of) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL (Excess of) as a % of Covered Payroll ((b-a)/c)
2008	\$2,191,623	\$2,491,342	\$299,719	88.0%	\$479,654	62.5%

# FINANCIAL SECTION

## Notes to Financial Statements

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, 2008
Actuarial Cost Method*:	Projected Unit Credit
Normal Cost Allocation:	Service
Amortization Method:	Level percent closed
Remaining Amortization Period:	30 years
Asset Valuation Method:	4-year smoothed market
Actuarial Assumptions:	
-Investment Rate of Return**	7.875%
-Projected Salaried Increases**	3.00 – 7.50%
-Cost-of-Living Adjustments***	None
-Mortality Rates****	Based on the 1995 George B. Buck Mortality Table

\*Cost Method changed to Projected Unit Credit for June 30, 2005 valuation.

All pre-FY07 contributions determined using Entry Age Normal.

\*\*Includes Inflation at 3%.

\*\*\*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.

\*\*\*\*The mortality rates based on the 1995 George B. Buck Mortality Table is presented on page 52 in the Actuarial Section of this report.

### 5. Cash Deposits, Investments and Securities Lending

*Custodial Credit Risk* – The 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, 2008, the carrying amount of cash was \$762,757.

# FINANCIAL SECTION

## Notes to Financial Statements

*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 expertise in particular kinds of assets that include stocks, bonds, real estate, private equity and hedge fund of funds.
- 3) Employ a diversity of investment managers with different investment styles on how to obtain their investment objective.
- 4) 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 and global asset allocation funds. 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, 2008, 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	\$ 78,942	-	\$ 74	\$ 14,246	\$ 22,825	\$ 15,571	\$ 26,226
U.S. Agency Securities	113,044	\$4,737	526	2,369	14,841	77,240	13,331
Corporate Debt	180,729	1,845	30,666	42,493	22,745	38,653	44,327
Bond Mutual Funds	160,715	-	9,272	143,321	3,310	4,812	-
Foreign Debt	<u>16,809</u>	<u>1,459</u>	<u>2,854</u>	<u>4,254</u>	<u>3,605</u>	<u>4,180</u>	<u>457</u>
Total	<u>\$550,239</u>	<u>\$8,041</u>	<u>\$43,392</u>	<u>\$206,683</u>	<u>\$67,326</u>	<u>\$140,456</u>	<u>\$84,341</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 increasing interest rates. The manager of each fixed income portfolio is responsible for determining the average maturity of their portfolio.

*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 manager, except for Pimco Diversified Fixed Income Fund, which targets 1/3 of their portfolio in high yield securities.

# FINANCIAL SECTION

## Notes to Financial Statements

As of June 30, 2008, the System's fixed income investments had the following risk characteristics:

Moody's Ratings or Comparable	Percent of Total Fund	Market Value (In Thousands)
AAA	13.92%	\$ 288,551
AA	0.77	15,957
A	1.15	23,867
BBB	1.98	40,982
BB	0.48	9,898
B	0.49	10,177
CCC	0.09	1,954
Ca	0.03	519
NR*	<u>7.64</u>	<u>158,334</u>
Total	<u>26.55 %</u>	<u>\$550,239</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, 2008.

### *Investment Commitments*

As of June 30, 2008, the System had \$45 million in outstanding private equity commitments and \$2.8 million in outstanding real estate 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. At June 30, 2008, the System had cash and cash equivalent futures of \$36.7 million in open forward exchange contracts. The System continues to invest in similar contracts. The Board's investment policy guidelines include a section on derivatives which speaks to the use of futures, forwards and other derivative instruments and securities. These guidelines strictly prohibit the use of derivatives to create leverage, create exposure to currencies and securities that would not otherwise be allowed, or increase the actual or potential risk of the portfolio.

# 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, 2008 is as follows:

Currency	Fair Value (\$ in thousands)
Australian Dollar	\$ 6,263
British Pound Sterling	27,689
Danish Krone	6,159
Euro Currency Unit	61,176
Hong Kong Dollar	4,249
Japanese Yen	27,832
Malaysian Ringgit	1
Norwegian Krone	1,459
Singapore Dollar	1,127
South Korean Won	3,082
Swedish Krona	3,749
Swiss Franc	<u>11,949</u>
Total	<u>\$154,735</u>

*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, 2008, 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 fair value of securities on loan as of June 30, 2008 and 2007 totaled \$245,141,289 and \$220,981,312, respectively.

All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in the lending agent's short-term investment pool, which at year-end has a weighted-average maturity of 22 days. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of the security loans made by other entities that use the agent's pool, which the System cannot determine. The System cannot pledge or sell collateral securities received unless the borrower defaults.

### **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.

# FINANCIAL SECTION

## Notes to Financial Statements

### 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 County believes that the legal premise for the action is flawed and will vigorously defend the suit. 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 Event - Declines in Investment Values

Since June 30, 2008, financial markets as a whole have incurred significant declines in values. As of December 23, 2008, the System's investment portfolio has incurred a significant decline in the values reported in the accompanying financial statements. However, because the values of individual investments fluctuate with market conditions, the amount of investment losses that the System will recognize in its future financial statements, if any, cannot be determined.

# 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 June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded (Excess of) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL (Excess of) as a % of Covered Payroll (b-a)/c
2003 <sup>(1)</sup>	\$1,740,713	\$1,830,584	\$89,871	95.1%	\$361,013	24.9%
2004 <sup>(2)</sup>	1,803,811	1,924,543	120,732	93.7	370,639	32.6
2005 <sup>(3)</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>(4)</sup>	2,101,023	2,289,452	188,429	91.8	439,913	42.8
2008 <sup>(5)</sup>	2,191,623	2,491,342	299,719	88.0	479,654	62.5

- (1) Assumption changes recommended in 2001 experience study were adopted, amortization period was changed to 25 years, Police and Fire DROP were added and Fire (joint and 50) eligibility was changed to 25 years.
- (2) Asset method change: difference between expected and actual return on market value smoothed over 4 years.
- (3) Cost method change: from Entry Age Normal to Projected Unit Credit.
- (4) 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.
- (5) 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.

### Schedule of Employers' Contributions

Fiscal Year Ended June 30	Annual Required Contribution	Percentage Contributed
2003	\$18,240,994	100%
2004	24,617,291	100
2005	29,967,618	100
2006	34,433,062	100
2007	40,065,314	100
2008	44,167,525	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, 2008 and 2007

	2008	2007
Investment Managers:		
Equity managers	\$ 4,521,368	\$ 4,686,222
Fixed income managers	2,139,877	1,381,049
Real estate managers	1,534,645	1,152,732
Hedge fund managers	1,176,059	1,277,019
Private equity managers	1,258,855	1,284,495
Global asset allocation managers	1,242,321	235,210
Total investment managers fees	11,873,125	10,016,727
Investment Service Fees:		
Custodian fees	289,516	287,174
Consultant fees	190,851	222,653
	480,367	509,827
Investment Expenses	12,353,492	10,526,554
Security Lending Fees:		
Agent fees	474,583	171,639
Borrower rebates	8,077,590	9,289,848
Total Investment Expenses	\$20,905,665	\$19,988,041

### Schedule of Administrative Expenses

For the Years Ended June 30, 2008 and 2007

	2008	2007
Personal Services:		
Salaries	\$ 443,736	\$ 409,018
Employee Fringe benefits	160,039	10,988
Total Personal Services	603,775	420,006
Professional Services:		
Actuarial	186,199	473,859
Legal and Financial	50,761	24,594
Data Processing	51,185	56,369
Medical	22,295	32,023
Audit	27,127	25,934
Total Professional Services	337,567	612,779
Communication:		
Printing	9,125	11,032
Telephone	3,739	2,016
Postage	37,686	108
Total Communication	50,550	13,156
Miscellaneous:		
Equipment and Supplies	16,762	20,206
Total Miscellaneous	16,762	20,206
Total administrative expenses	\$1,008,654	\$1,066,147

**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, BNYMellon. NEPC relies on this source for security pricing, calculation of accruals, and all transactions. NEPC reconciles the monthly rates of return provided by BNYMellon with those calculated by each investment manager. NEPC exercises reasonable professional care in preparing the performance report. The rates of return are calculated using a time-weighted rate of return methodology based upon market values. 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 condition 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 6/30/08**

<i>Asset Class</i>	<i>Allocation Target</i>	<i>Allocation Range</i>
<i>U. S. Equities</i>	<i>37%</i>	<i>32 - 42%</i>
<i>International Equities</i>	<i>13%</i>	<i>9 - 17%</i>
<i>Private Equities</i>	<i>5%</i>	<i>0 - 7%</i>
<i>Fixed Income</i>	<i>25%</i>	<i>20 - 30%</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>10%</i>	<i>7 - 13%</i>
<b><i>Total</i></b>	<b><i>100%</i></b>	<b><i>--</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 that 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, 2008, this universe contained actual public fund data for 178 public plans with an aggregate market value of \$728 billion.

## Market Overview

Global equity markets, as measured by the MSCI World Index, fell 10.6% for the fiscal year ending June 30, 2008, owing to growing concerns over the U.S. housing and financial markets. Although the year got off to a respectable start, with global equities posting a 2.4% return in the first quarter of the fiscal year, economic woes mounted as the year progressed and subprime debt worked its way through the financial system. Global financial companies, banks and insurance companies were the hardest hit while commodity-linked companies fared the best. The monetary and fiscal authority's efforts to calm the markets were continually undermined by rising commodity prices and growing investor uncertainty throughout the year.

Bonds saw a "flight to quality", which led to widening of spreads between Treasuries bonds and other debt issues during the first three quarters of the fiscal year. Despite a weak fourth quarter close, the Citigroup World Government Bond Index posted a 17.0% return over the fiscal year ending June 30, 2008. Domestic stocks, as measured by the Wilshire 5000, fell 12.5% for the fiscal year ended June 30, 2008. Growth stocks outperformed value stocks over the year, owing to weak returns in the financial sector. The Russell 1000 Growth posted a (6.0%) return for the year compared to a (18.8%) return for the Russell 1000 Value. Large cap stocks outperformed small cap stocks in the quarter with the Russell 1000 posting a (12.4%) return and the Russell 2000, (16.2%). Energy related stocks were the strongest performer over the full year, posting a 23.6% return. Financial stocks trailed with a (41.9%) return for the fiscal year.

Developed international equity markets, as measured by the MSCI EAFE Index, fell 10.6% for the fiscal year in US dollar terms. In local terms, the MSCI EAFE Index fell 20.3% for the year. The UK and Japan were the weakest market over the fiscal year, posting returns of (13.2%) and (12.0%), respectively. However, Japan bounced back in the fourth fiscal quarter posting a 2.5% return. The emerging markets fared the best over the fiscal year, returning 4.6%.

The flight to quality combined with a weak dollar benefited high quality global bonds for most of the fiscal year. US Treasury bonds posted a 10.3% return for the fiscal year. In the fourth fiscal quarter, interest rates moved higher generating negative returns for most fixed income markets. The Lehman Aggregate Index posted a (1.0%) return for the quarter. US Government bonds posted the weakest returns in the quarter with a (1.9%) return. Conversely, high yield bonds posted a 1.8% return in the quarter. Global bonds, which had benefited from a weak dollar for most of the year, posted a (4.2%) return in the quarter as the dollar rose against foreign currency in the quarter.

## Investment Performance

For the fiscal year ended June 30, 2008, the System's investment portfolio lost 4.5%, including dividends and interest income, unrealized gains and losses, and management fees and expenses. The System's domestic equity portfolio returned (13.4%) net of fee return over the fiscal year, trailing the (12.5%) return of the broad U.S. equity market, as measured by the Wilshire 5000 Index. Weak performance among the large cap managers detracted from return over the full year. The System's non-US equity portfolio's net of fee return of (6.5%) exceeded the return of the international equity benchmark due to strong relative performance from the growth international equity

# INVESTMENT SECTION

manager. The one-year private equity portfolio return was 18.1%. The fixed income portfolio returned 3.7% on a net-of-fee basis over the fiscal year and lagged the broad domestic bond 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 (4.5%) ranked in the 50<sup>th</sup> percentile of the ICC Public Funds Universe for the fiscal year. The market value of the System’s assets decreased from \$2.25 billion on June 30, 2007 to \$2.06 billion on June 30, 2008. This decrease resulted from investment losses of approximately \$125 million plus net withdrawals of approximately \$65 million.

The net of fee returns for the fiscal year ending June 30, 2008 are shown in the following table.

	Market Value (in Millions)	Percent of Total	Fiscal Year Rate of Return	
			System	Benchmark
U S Equities	\$ 764.4	37.0%	(13.4)%	(12.5)%
International Equities	261.0	12.7	(6.5)	(6.6)
Private Equity	76.8	3.7	18.1	16.0
Hedge Funds	107.5	5.2	(1.0)	(0.3)
Real Estate	115.4	5.6	5.8	9.2
Fixed Income	521.7	25.3	3.7	6.2
GAA	212.4	10.3	2.6	(3.7)
Cash	3.9	0.2	(0.6)	3.6
<b>Total Fund*</b>	<b>\$2,063.1</b>	<b>100.0%</b>	<b>(4.9)%</b>	<b>(3.8)%</b>

\*The Total Fund shown above in the amount of \$2,063.1 includes short-term investments of \$87.5, accrued interest and dividends receivable of \$4.9, receivables for investment sold of \$71.3 and payables for investments purchased of \$173.9. These items are separately reported from “Total Investments” in the Statement of Plan Net Assets.

## Investment Strategies

During the fiscal year, the Trustees implemented the following changes to the Fund, which are designed to better meet the System’s long-term risk and return objectives.

- Hired four large cap growth managers.
- Hired two portable alpha equity managers.
- Committed capital to one new private equity fund.
- Terminated one large cap growth manager.

Doris Ewing  
Partner, New England Pension Consultants

# 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 and private equity. The investment policy targets are 37% in U.S. equities, 13% in international equities, 25% in core-plus fixed income investments, 5% in real estate, 5% in hedge funds, 5% in private equity and 10% to global asset allocation strategies. 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 Lehman Brothers Universal Index, 60% MSCI World/40% WGBI blended index, the NCREIF Index, 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. Prior to February 2005, the Policy Index was comprised of 50% Wilshire 5000 Stock Index, 15% MSCI All-Country World Ex-U.S. Index, (MSCI ACWXUS), 33.5% Lehman Brothers Aggregate Bond Index and 1.5% Cambridge Venture Capital Index.

From February 2005 through June 30, 2007, the Balanced Index is comprised of 30% 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% NACREIF 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.

For FY 2008, the Balanced Index is comprised of 30% S&P 500; 7% Russell 2000 Index; 10% Morgan Stanley EAFE Index; 3% Morgan Stanley Emerging Markets Free Index; 25% Lehman Universal Bond Index; 3% MSCI World / 2% WGBI and 5% - 90 day T-Bills plus 6%; 5% Lehman High Yield Index; 5% NACREIF Index; 5% Venture Economics Private Equity Index; 5% HFRI Fund of Fund Index.

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

# INVESTMENT SECTION

## Investment Return Summary (Percentage Change)

<b><u>Rates of Return</u></b>	<b><u>FY</u></b> <b><u>2004</u></b>	<b><u>FY</u></b> <b><u>2005</u></b>	<b><u>FY</u></b> <b><u>2006</u></b>	<b><u>FY</u></b> <b><u>2007</u></b>	<b><u>FY</u></b> <b><u>2008</u></b>	<b><u>Annualized</u></b> <b><u>Rate Over</u></b> <b><u>3 Years</u></b>	<b><u>Annualized</u></b> <b><u>Rate Over</u></b> <b><u>5 Years</u></b>
U.S. Common Stock	21.9%	8.5%	9.2%	19.8%	(13.2)%	4.3%	8.5%
Wilshire 5000 Stock Index	21.2	8.2	9.9	20.5	(12.5)	5.0	8.7
International Common Stock	28.2	14.0	25.5	32.5	(5.9)	16.1	18.0
MSCI ACWXUS	32.0	16.5	27.9	29.6	(6.6)	15.7	18.9
GAA	-	-	-	-	3.1	-	-
60% MSCI World / 40% WGBI & 90-day T-Bills plus 6%	-	-	-	15.1	(3.7)	-	-
Fixed Income	1.7	7.6	0.1	6.2	4.0	3.4	3.9
Lehman Brothers Universal*	0.3	6.8	(0.8)	6.6	6.2	4.2	4.2
Real Estate	-	-	-	19.4	6.4	-	-
NCREIF Index**	-	-	-	17.2	9.2	-	-
Hedge Funds	-	-	-	15.9	(0.2)	-	-
Hedge Fund-of-Funds Index	-	-	-	13.6	(0.3)	-	-
Private Equity	14.7	28.5	12.8	20.7	18.1	18.4	18.3
Private Equity Benchmark***	2.9	29.2	15.5	54.4	16.0	20.9	20.6
Total System Portfolio	15.0	9.4	9.2	17.2	(4.5)	7.0	9.0
<b><u>Comparative Index</u></b>							
Balanced Index	14.7	9.2	10.1	17.6	(3.8)	7.5	9.1
<b><u>Inflation Rate</u></b>							
Consumer Price Index	3.2	2.4	4.3	2.7	4.9	3.9	3.5

Note: Performance is gross of fees.

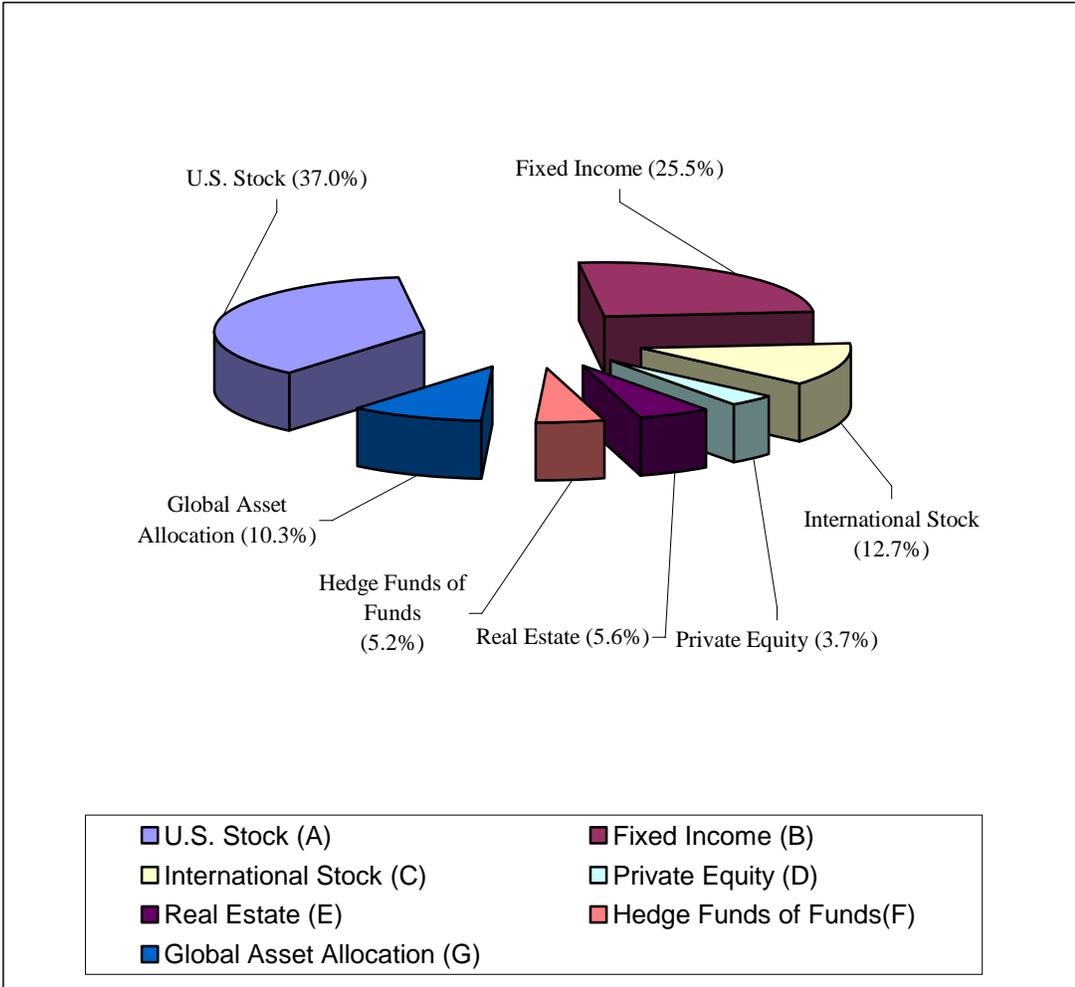
\*The Lehman Brothers Universal Index was used for the FY2007 Fixed Income composite index. Prior to FY2007, the Lehman Brothers Aggregate Index was used as the benchmark.

\*\*The benchmark was changed to the NCREIF Index in February 2005.

\*\*\*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.

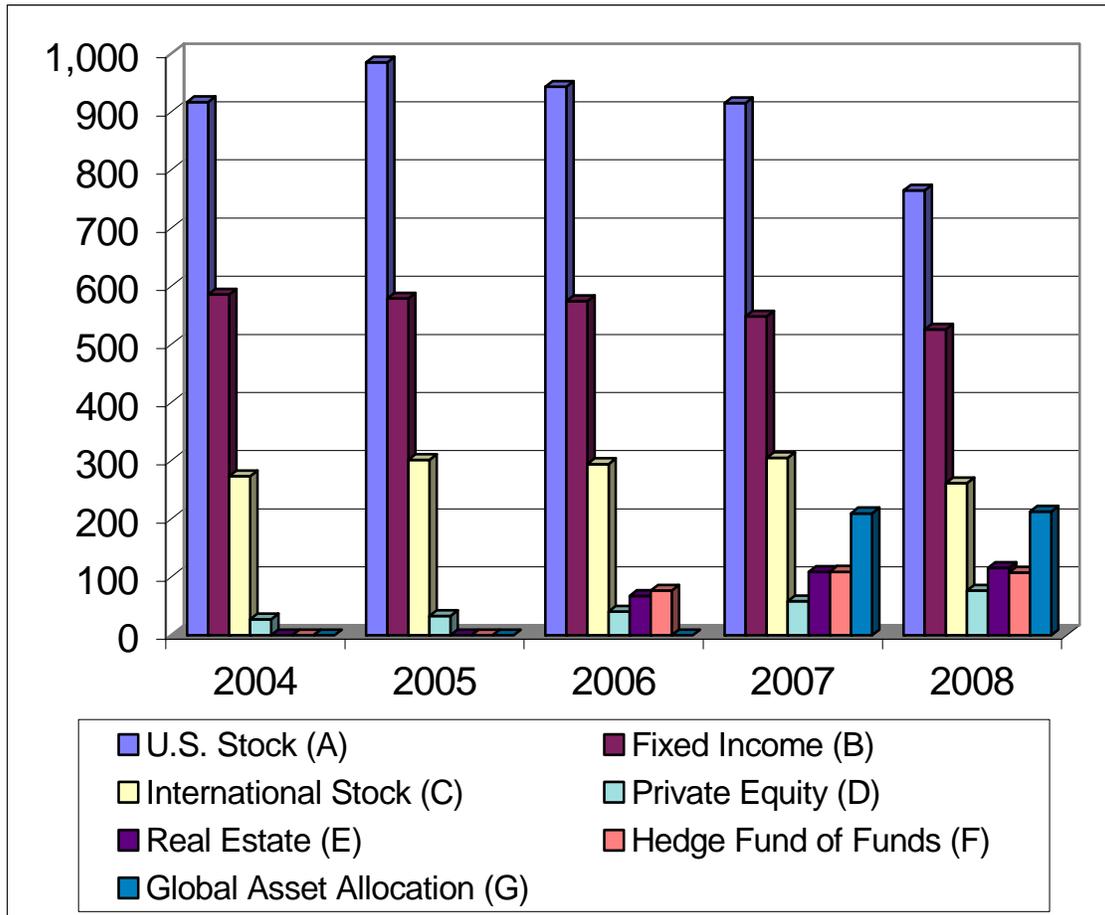
# INVESTMENT SECTION

**Portfolio Composition by Manager Type**  
**Market Value of Investments**  
**Percent of Total Fund**  
**As of June 30, 2008**



# INVESTMENT SECTION

**Portfolio Composition by Manager Type**  
**Market Value of Investments**  
**Percent of Total Fund**  
**As of June 30, 2004, 2005, 2006, 2007 & 2008**  
 (Expressed in Millions)



Investment Type	2004		2005		2006		2007		2008	
U.S. Stock (A)	\$ 916.5	50.9%	\$ 984.9	51.9%	\$ 943.1	47.2%	\$ 914.8	40.7%	\$ 764.4	37.0%
Fixed Income (B)	585.9	32.5%	579.0	30.5%	574.4	28.9%	547.7	24.3%	525.6	25.5%
International Stock (C)	273.1	15.1%	301.2	15.9%	294.2	14.7%	304.9	13.5%	261.0	12.7%
Private Equity (D)	27.3	1.5%	32.8	1.7%	40.3	2.0%	58.5	2.6%	76.8	3.7%
Real Estate (E)	0.0	0.0%	0.0	0.0%	67.4	3.4%	108.8	4.8%	115.4	5.6%
Hedge Fund of Funds (F)	0.0	0.0%	0.0	0.0%	76.6	3.8%	109.0	4.8%	107.5	5.2%
Global Asset Alloc. (G)	0.0	0.0%	0.0	0.0%	0.0	0.0%	209.3	9.3%	212.4	10.3%
<b>Total</b>	<b>\$1,802.8</b>	<b>100.0%</b>	<b>\$1,897.9</b>	<b>100.0%</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>

# INVESTMENT SECTION

## List of Largest Assets Held (June 30, 2008)

<b>Ten Largest Equity Holdings (STOCKS)</b>		PAR VALUE/ SHARES	MARKET VALUE		
1)	Mastercard, Inc	24,300	\$6,452,136		
2)	Kinder Morgan MGMT	115,162	6,201,420		
3)	Canadian Natl. Railway Co.	127,500	6,130,200		
4)	Berkshire Hathaway Inc.	1,300	5,215,600		
5)	Burlington North Santa FE Corp	35,800	3,576,062		
6)	FLIR Sys Inc.	86,900	3,525,533		
7)	Devon Energy Corp	29,000	3,484,640		
8)	Cabot Oil & Gas Corp	51,100	3,461,003		
9)	Microsoft Corp	123,600	3,400,236		
10)	NII Holdings Inc.	68,900	3,272,061		
<b>Ten Largest Fixed Income Holdings (NOTES &amp; BONDS)</b>		INTEREST RATE	MATURITY DATE	PAR VALUE/ SHARES	MARKET VALUE
1)	FNMA SF Mtg.	5.000%	07/01/2038	21,100,000	\$20,222,240
2)	FNMA SF Mtg.	4.500	07/01/2038	21,575,000	19,991,395
3)	FNMA SF Mtg.	5.000	08/01/2038	10,900,000	10,423,670
4)	GNMA SF Mtg.	5.000	08/15/2038	10,500,000	10,146,150
5)	FNMA SF Mtg.	5.500	07/01/2023	8,900,000	8,958,740
6)	GNMA SF Mtg.	5.500	08/15/2038	7,970,000	7,905,443
7)	GNMA SF Mtg.	6.000	08/15/2038	6,265,000	6,339,554
8)	FNMA SF Mtg.	5.000	07/01/2038	5,415,000	5,189,736
9)	FHLMC Pool	5.500	01/01/2038	5,158,468	5,113,009
10)	FNMA SF Mtg.	5.500	07/01/2038	4,390,000	4,326,784

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

# INVESTMENT SECTION

## Supplementary Supporting Schedules Schedule of Fees

(Year Ended June 30, 2008)

<b>Investment Services</b>	<b>Assets Under Management</b>	<b>Fees</b>
<i>Equity Managers:</i>		
Alex. Brown Investment Mgmt.	\$ 93,669,828	\$ 726,739
Atlanta Life Investment Advisor	21,839,184	7,280
Barclays International Fund	44,066,554	64,666
Barclays US Equity	397,274,662	71,545
Benchmark Plus Management	25,785,278	90,385
Brown Capital Management	28,642,896	494,455
Cadence Capital Management	43,928,593	442,722
CIBC Asset Management	78,099,094	538,173
Earnest Partners	62,853,069	393,788
Gottex Fund Management	25,675,833	134,174
John HSU Capital Group	21,298,172	11,040
LSV Asset Management	77,829,355	526,266
Lynmar Capital Group	21,449,283	11,314
Mondrian Investment	61,058,822	550,912
Profit Investment Mgmt.	21,549,846	8,979
Legg Mason	0	448,930
Mellon Transition Mgmt	398,504	0
Total Equity Managers	1,025,418,973	4,521,368
<i>Fixed Income Managers:</i>		
Earnest Partners	84,419,077	189,872
Pacific Investment Management Co.	143,321,065	1,251,357
Reams Asset Management	145,493,451	228,517
Western Asset Management	148,482,026	361,215
Total Fixed Income Managers	521,715,619	2,030,961
<i>Private Equity Managers:</i>		
Edison Venture Fund	6,170,425	17,826
Grotech Capital Group	343,624	16,379
HarbourVest Venture Partners, Inc.	54,247,711	842,357
Mesirow Financial	2,528,213	172,974
Newstone Capital	5,462,029	83,063
Paul Capital	788,597	57,195
Siguler Guff	7,238,992	69,061
Total Private Equity Managers	76,779,591	1,258,855
<i>Real Estate Managers:</i>		
Transwestern Investment Co.	7,541,709	91,738
ING Clarion	38,479,552	363,027
JP Morgan	33,109,502	566,472
UBS Global	36,223,574	513,408
Total Real Estate Managers	115,354,337	1,534,645
<i>Hedge Fund of Funds Managers:</i>		
EIM Management	56,603,166	653,756
Federal Street	50,946,437	522,303
Total Hedge Fund Managers	107,549,603	1,176,059
<i>Global Asset Allocation Managers:</i>		
Bridgewater	119,175,668	454,539
Mellon Capital Management	93,192,298	787,782
Total Global Asset Allocation Managers	212,367,966	1,242,321
<i>Short-Term Investment Manager:</i>		
Mellon Cash Manager	3,925,215	108,916
<i>Other Investment Service Fees:</i>		
Custodian		289,516
Security lending		8,552,173
Investment consultant		190,851
Total Investment Service Fees		9,032,540
Total*	\$2,063,111,304	\$20,905,665

\*The Total "Asset Under Management" shown above in the amount of \$2,063,111,304 includes short-term investments of \$87,511,506, accrued interest and dividends receivable of \$4,914,551, receivables for investment sold of \$71,318,882 and payables for investments purchased of \$173,977,077. These items are separately reported from "Total Investments" in the Statement of Plan Net Assets.

# INVESTMENT SECTION

## Supplementary Supporting Schedules Schedule of Commissions (Year Ended June 30, 2008)

<u>Investment Broker Firms</u>	<u>Number of Shares Traded</u>	<u>Total Commissions</u>	<u>Commission Per Share</u>
BNY Convergenx	10,297,933	\$ 210,146	0.02
Investment Technology Groups	2,720,852	54,356	0.02
Bernstein Sanford C & Co.	526,530	20,265	0.04
ITG Inc.	1,002,555	20,051	0.02
Credit Suisse	1,614,385	18,638	0.01
Raymond James & Assoc. Inc.	436,968	17,074	0.04
Merrill Lynch Pierce Fenner Smith Inc.	473,866	16,146	0.03
Goldman Sachs & Co.	401,580	15,986	0.04
SIS Segaintersettle AG, Zurich	146,400	14,300	0.10
Bear Stearns Sec Corp.	352,123	14,210	0.04
Citigroup Global Markets Inc.	366,600	13,934	0.04
CAP INSTL SVCS Inc.	348,752	13,303	0.04
Lehman Bros Inc.	727,464	12,952	0.02
Jefferies & Co Inc.	391,819	12,898	0.03
Sanford C. Bernstein & Co Inc.	509,428	11,448	0.02
Instinet Corp.	574,330	11,031	0.02
Liquidnet Inc.	488,428	10,373	0.02
UBS Securities LLC	560,040	10,326	0.02
Miscellaneous (Under \$10,000)	<u>9,348,130</u>	<u>241,171</u>	0.03
<b>Total</b>	<b><u>31,288,183</u></b>	<b><u>\$738,608</u></b>	

# INVESTMENT SECTION

## Investment Summary

(June 30, 2008)

TYPE OF INVESTMENTS	FAIR VALUE	% of FAIR VALUE
Fixed Income:		
U.S. Government & Agencies Securities	\$ 191,985,868	9.3%
Corporate Bonds	180,728,804	8.7
Foreign Bonds	16,809,083	0.8
Bond Mutual Funds	160,715,460	7.7
Total Fixed Income	550,239,215	26.5
Common Stock:		
Basic Industries	19,092,700	0.9
Consumer Durable Goods	7,753,217	0.4
Consumer Non-Durables	24,996,814	1.2
Consumer Services	36,663,012	1.8
Energy	44,946,909	2.2
Financial Services	65,233,197	3.1
Health Care	45,744,830	2.2
MEDIA	11,695,658	0.6
Technology	65,534,485	3.2
Transportation	17,716,605	0.8
Utilities	3,736,373	0.2
General Business	115,592,860	5.6
Total Common Stock	458,706,660	22.2
Other Investments:		
Stock Mutual Funds	553,860,943	26.7
Real Estate Equity Funds	115,354,208	5.6
Hedge Funds	106,034,860	5.1
Private Equity Funds	76,779,590	3.7
Global Asset Allocation Funds	212,367,966	10.2
Total Other Investments	1,064,397,567	51.3
Total Investments at fair value	\$2,073,343,442	100.0%

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*ACTUARIAL  
SECTION*

# — ACTUARIAL SECTION —

## Actuary's Certification Letter



December 9, 2008

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, 2008, 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, including a valuation interest rate assumption of 7 $\frac{7}{8}$ % per annum, compounded annually.

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, 2008 valuation determine the contribution appropriation for the fiscal year ending June 30, 2010.

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.

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 four-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 four years. The valuation assets are not less than 86% of the market value and not more than 114% of the market value. An interest rate of 7 $\frac{7}{8}$ % was used in the valuation, as adopted for valuation purposes effective June 30, 1993.

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# — ACTUARIAL SECTION —

Board of Trustees  
December 9, 2008  
Page 2

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**

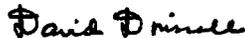
The results of the valuation indicate that the recommended contribution appropriation is adequate to fund the actuarial liabilities on account of all benefits payable under the System, when taken together with member contributions and with the current assets of the System. Included in the valuation report 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 under the supervision of Timothy J. Abramic and reviewed by David L. Driscoll and S. Lynn Hill. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and 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



S. Lynn Hill  
Director, Retirement Consulting



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

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# — 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 are as follows:

Age	Annual Rates of Salary Increase	
	General Employees, Correctional Officers and Deputy Sheriffs	Police Officers and Firefighters
25	7.50%	7.25%
30	6.00	5.75
35	5.00	4.75
40	4.50	4.25
45	4.00	3.75
50	3.50%	3.25%
55	3.00	3.00
60	3.00	3.00
65	3.00	3.00

3% of each increase is attributable to inflation, while the remainder is due to productivity, merit or seniority.

The effect of these assumptions is illustrated by the following examples: When used in the valuation process, these assumptions produce an effective annual average of 4.7% over a 27-year career for a policeman hired at age 25, and 4.1% 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 Before 10 Years of Service	Refund After 10 Years of Service	Termination Benefit After 10 Years of 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 Before 10 Years of Service	Refund After 10 Years of Service	Termination Benefit After 10 Years of 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				30 Years or Age 65** with 5 Years		
5 - 9 Years Service		10 - 19 Years Service	20 - 29 Years Service But Without Rule of 85	5 - 9 Years Service				
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 6/30/2007
	Normal Retirement (20 Years)	DROP Retirement (27 Years)	Age 60 with 5 to 10 Years of Service	Age 60 with 10 to 20 Years of Service	Retirement (Age 67 and 10 Years or 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 6/30/2007
	Normal Retirement (20 Years)	Age 55 with 5 to 10 Years of Service	Age 55 with 10 to 20 Years of Service	Retirement (Age 60 and 10 Years or 25 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 6/30/2007
	Normal Retirement (25 years of service)	Age 60 with 5 to 10 Years of Service	Age 60 with 10 to 20 Years of Service	Age 50 with 20 to 25 Years of Service	Retirement (Age 60 and 10 Years or 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) 75% of the gain/(loss) during the preceding year, (2) 50% of the gain/(loss) during the second preceding year, and (3) 25% of the gain/(loss) during the third 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. Valuation assets are not less than 86% of the market value and not more than 114% of the market value. (Adopted as of June 30, 2004).

**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, 2008 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.

# — 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
1999	5,847	\$168,148,206	\$28,758	4.2%	2.0%
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

### POLICE OFFICERS

Valuation as of June 30	Number of Active members	Valuation Payroll	Average Salary	Percent Increase (Decrease)	CPI % Increase
1999	1,712	\$65,427,248	\$38,217	2.8%	2.0%
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

# — 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
1999	1,009	\$41,600,617	\$41,230	(0.5)%	2.0%
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

### CORRECTIONAL OFFICERS AND DEPUTY SHERIFFS

Valuation as of June 30	Number of Active members	Valuation Payroll	Average Salary	Percent Increase (Decrease)	CPI % Increase
1999	232	\$7,319,978	\$31,552	2.6%	2.0%
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

# — 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
1999	8,800	\$282,496,049	\$32,102	3.2%	2.0%
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

## 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		
1999	240	\$5,439,692	149	\$1,166,916	5,323	\$79,346,792	5.7%	\$14,906
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

# — 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 as of June 30	Accrued Liability for:			Actuarial Value of Assets	Portion of Accrued Liability Covered by Actuarial Value of Assets		
	(A) Active Member Contribution	(B) Retirees and Beneficiaries	(C) Active Member Employer Financed		(A)	(B)	(C)
1999 <sup>(1)</sup>	\$216,630,554	\$796,268,960	\$405,627,762	\$1,566,992,511	100.0%	100.0%	100.0%
2000 <sup>(2)</sup>	230,386,737	844,563,160	436,594,314	1,689,860,650	100.0	100.0	100.0
2001 <sup>(3)</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>(4)</sup>	286,223,066	947,448,642	596,912,599	1,740,713,074	100.0	100.0	84.9
2004 <sup>(5)</sup>	309,108,608	969,870,802	645,563,619	1,803,810,968	100.0	100.0	81.3
2005 <sup>(6)</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>(7)</sup>	363,778,826	1,247,373,485	678,300,211	2,101,023,411	100.0	100.0	72.2
2008 <sup>(8)</sup>	391,743,335	1,307,885,347	791,713,328	2,191,623,378	100.0	100.0	62.1

- (1) Revise survivor benefits and eligibility – Section 23-59 of the code.
- (2) 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.
- (3) Change in benefits and retirement rates for Police and Firefighters.
- (4) 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.
- (5) Asset method change: difference between expected and actual return on market value smoothed over 4 years.
- (6) Cost method change: From Entry Age Normal to Projected Unit Credit.
- (7) 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.
- (8) Amortization period was changed to 30 years.

# — ACTUARIAL SECTION —

## Analysis of Change in Unfunded Accrued Liability For the Year Ended June 30, 2008

<i>Reconciliation of Gain (Loss) in the Unfunded Accrued Liability:</i>	Amount
1. Unfunded Accrued Liability at June 30, 2007	\$188,429,111
2. Interest Charge at 7.875% to June 30, 2008	14,838,793
3. Contributions Toward Unfunded Accrued Liability	11,209,733
4. Expected Unfunded Accrued Liability at June 30, 2008	
= (1) + (2) – (3)	192,058,171
5. Actual Unfunded Accrued Liability at June 30, 2008	299,718,632
6. Increase (Decrease) from Expected / Actuarial Loss at June 30, 2008	
= (5) – (4)	\$107,660,461

## Progress Toward Amortization of Unfunded Accrued Liability For the Year Ended June 30, 2008

<b>Unfunded Accrued Liability</b>	Amount	Amortization Period
Employer Base Covered by Scheduled 2009 Amortization Payment	\$13,291,887	1 Year
2008 Fresh Start Employer Base	176,304,779	30 Years
2008 Member Base for 12 Month Average Final Compensation	2,461,505	4 Years
2008 Actuarial Loss	<u>107,660,461</u>	30 Years
<b>Total</b>	<u>\$299,718,632</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 2008 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.

# — 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, vesting of employer contributions and average final compensation.

### 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 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 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 member, 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. A member, hired on or after July 1, 2007, 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 1/55<sup>th</sup> 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 1/70<sup>th</sup> 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.

For the following sections, AFC is defined as the annual earnable compensation during the 12 consecutive calendar months affording the highest average.

- (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.
- (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.
- (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.

# — 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 hired prior to July 1, 2007, with less than 20 years of creditable service receive an allowance equal to general employees. Correctional officers 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 VII, reduces the maximum allowance as described above. The options are as follows:

- I. 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.
- II. Allows 100% of the member's retirement allowance to continue to be paid to the beneficiary after the member's death.
- III. Allows 50% of the member's retirement allowance to continue to be paid to the beneficiary after the member's death.
- IV. Allows any portion of the retirement allowance to continue to be paid to the beneficiary after the member's death.
- V. 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 II, III, IV, V or VI. The retirement allowance will then be recomputed.
- VI. 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 II, III, IV, V or VI. The retirement allowance will then be recomputed.

# — ACTUARIAL SECTION —

## Summary of Plan Provisions, continued

VII. 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 is 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, and an interest credit of 5%, plus any cost of living increase granted to retirees. 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 II.

# — 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 II.

**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.

***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 66 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 67 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	Total Additions to Plan Net Assets	Benefit Payments	Refunds of Contribution	Administrative Expenses*	Total Deductions from Plan Net Assets	
1999	\$17,208	\$22,296	\$224,445	\$263,949	\$77,588	\$2,164	-	\$79,752	\$184,197
2000	19,144	17,975	165,917	203,036	83,105	3,361	\$215	86,681	116,355
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)

\*Administrative expenses were paid by the County prior to FY 2000. 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						
1999	\$56,580	\$3,976	\$13,068	\$3,665	\$121	\$178	\$77,588	\$2,134	-	\$2,134
2000	61,399	4,263	13,412	3,801	123	107	83,105	3,248	-	3,248
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

\*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 FY2007.

# STATISTICAL SECTION

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

Fiscal Year Ended June 30, 2008

Amount of Monthly Benefit	Number of Retirees	Type of Retirement					Deferred Future Benefits
		1	2	3	4	5	
Deferred	476	-	-	-	-	-	476
\$1 - \$300	585	452	121	-	12	-	-
\$301 - \$600	877	650	150	-	71	6	-
\$601 - \$900	746	534	89	1	119	3	-
\$901 - \$1,200	596	431	74	21	61	9	-
\$1,201 - \$1,500	551	378	48	43	48	34	-
\$1,501 - \$1,800	454	298	21	42	45	48	-
\$1,801 - \$2,100	464	317	16	24	28	79	-
\$2,101 - \$2,400	445	293	16	30	15	91	-
\$2,401 - \$2,700	390	260	10	29	9	82	-
\$2,701 - \$3,000	310	213	7	20	6	64	-
Over \$3,000	<u>1,032</u>	<u>837</u>	<u>28</u>	<u>32</u>	<u>11</u>	<u>124</u>	<u>-</u>
Totals	<u>6,926</u>	<u>4,663</u>	<u>580</u>	<u>242</u>	<u>425</u>	<u>540</u>	<u>476</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, 2008

Amount of Monthly Benefit	Number of Retirees	Option Selected								Deferred Future Benefits	
		M	I	II	III	IV	V	VI	VII		
Deferred	476	-	-	-	-	-	-	-	-	-	476
\$1 - \$300	585	313	189	17	12	-	32	22	-	-	-
\$301 - \$600	877	402	315	36	24	-	46	54	-	-	-
\$601 - \$900	746	342	266	15	30	-	39	54	-	-	-
\$901 - \$1,200	596	256	195	21	27	5	35	57	-	-	-
\$1,201 - \$1,500	551	201	167	22	38	3	46	74	-	-	-
\$1,501 - \$1,800	454	203	124	14	28	6	27	52	-	-	-
\$1,801 - \$2,100	464	217	105	22	21	13	41	45	-	-	-
\$2,101 - \$2,400	445	231	88	13	17	25	28	43	-	-	-
\$2,401 - \$2,700	390	193	57	5	16	22	38	59	-	-	-
\$2,701 - \$3,000	310	150	51	9	13	31	17	38	1	-	-
Over \$3,000	<u>1,032</u>	<u>372</u>	<u>137</u>	<u>14</u>	<u>32</u>	<u>131</u>	<u>29</u>	<u>93</u>	<u>224</u>	-	-
Totals	<u>6,926</u>	<u>2,880</u>	<u>1,694</u>	<u>188</u>	<u>258</u>	<u>236</u>	<u>378</u>	<u>591</u>	<u>225</u>	<u>476</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.
- I = Guarantees the return of the member's accumulated contributions and interest less the member's accumulated reserves already paid.
- II = Guarantees 100% of the member's payment to the designated beneficiary for their lifetime.
- III = Guarantees 50% of the member's payment to the designated beneficiary for their lifetime.
- IV = Guarantees an alternative specified % of the member's payment to the designated beneficiary for their lifetime.
- V = Guarantees 100% payment to beneficiary, unless beneficiary divorces or predeceases member. Allowance then pops-up to maximum.
- VI = Guarantees 50% payment to beneficiary, unless beneficiary divorces or predeceases member. Allowance then pops-up to maximum.
- VII = 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, 2002 to June 30, 2003						
Average Monthly Benefit	\$239	\$738	\$1,092	\$1,690	\$2,638	\$3,531
Average - Average Final Compensation	\$26,275	\$33,433	\$37,568	\$46,283	\$56,451	\$59,597
Number of Active Retirees	37	43	28	56	49	56
July 1, 2003 to June 30, 2004						
Average Monthly Benefit	\$362	\$659	\$1,163	\$1,676	\$2,489	\$2,434
Average - Average Final Compensation	\$26,651	\$32,934	\$38,015	\$47,095	\$53,789	\$50,761
Number of Active Retirees	39	39	22	51	41	58
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

# STATISTICAL SECTION

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

Participating Government Employers	2008			1999		
	<u>Covered Employees</u>	<u>Rank</u>	<u>Percentage of Total System</u>	<u>Covered Employees</u>	<u>Rank</u>	<u>Percentage of Total System</u>
Baltimore County, Maryland	7,014	1	73.28%	6,402	1	72.76%
<u>Certain employees of:</u>						
Board of Education	2,307	2	24.11	2,144	2	24.36
Community College	154	3	1.61	155	3	1.76
Revenue Authority	59	4	0.62	68	4	0.77
Board of Library Trustees	36	5	0.38	31	5	0.35
Total	<u>9,570</u>		<u>100.00%</u>	<u>8,800</u>		<u>100.00%</u>

