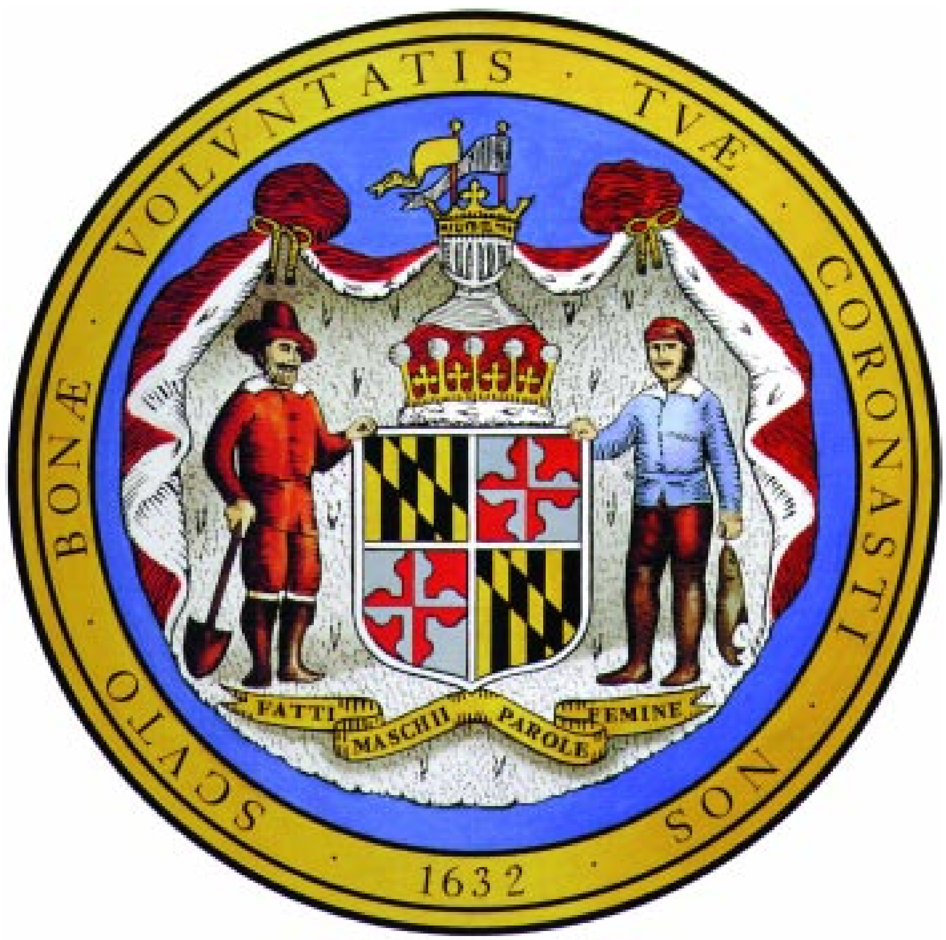
# State Retirement and Pension System of Maryland

# Comprehensive Annual Financial Report

## A Pension Trust Fund of the State of Maryland




## For the Year Ended June 30, 1999

*prepared by:*
State Retirement Agency of Maryland
301 W. Preston Street
Baltimore, Maryland 21201

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# STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
## STATE RETIREMENT AGENCY

301 WEST PRESTON STREET
BALTIMORE, MARYLAND 21201-2363
TELEPHONE: 410-767-4030
1-800-492-5909

PETER VAUGHN
EXECUTIVE DIRECTOR
SECRETARY TO THE BOARD



December 14, 1999

# Letter of Transmittal

Honorable Chairman & Members of the Board of Trustees:

We are pleased to submit the Comprehensive Annual Financial Report for the State Retirement and Pension System of Maryland (the "System") for the fiscal year ended June 30, 1999. We believe this report fairly reflects the extraordinary results achieved during 1999 through the collective efforts of the Board of Trustees and Agency staff to protect and enhance the System's assets.

The System is charged with the fiduciary responsibility for properly administering the retirement and pension allowances and other benefits, while striving to keep employer contribution rates as affordable as possible through excellence in executing the System's investment program. Members covered by the plans include State employees, teachers, law enforcement officers, legislators, judges, as well as local government employees and fire fighters whose employers have elected to participate in the System.

Seventy-two years ago, the first statewide retirement plan in Maryland (the Teachers' Retirement System) was established. Fourteen years later, in 1941, the Employees' Retirement System was established. Together these two plans make up the majority of the System's membership which now provides monthly allowances to 77,478 retirees and beneficiaries, and is an essential element of the future financial security for over 214,339 active participating members. Descriptions of the membership requirements of, and benefits provided by, each plan administered by the System are included in the Plan Summary Section starting on page 81.

This Comprehensive Annual Financial Report contains six sections. The Introductory Section includes this letter of transmittal, along with information about the administrative structure of the System. The Financial, Actuarial and Investment Sections provide a comprehensive review of the System's financial position, the results of its operations and its funded status. Viewed separately, each of these three sections provides information about a different aspect of the System's long-standing record of stewardship and financial stability. In this regard, the Financial Section contains the report from the System's independent auditor, the combined financial statements and supplementary financial data. The Actuarial Section contains the independent actuary's certification, as well as the results of the System's annual actuarial valuation. The Investment Section includes a report from the System's Chief Investment Officer highlighting the past year's performance in addition to various summary level portfolio composition and performance data. The Plan Summary and Statistical Sections provide detailed descriptions of the various plans' provisions and the demographic composition of the membership segments affected by each plan.

## Economic Environment

Despite a rather slow start early in fiscal year 1999, the financial markets recovered nicely to continue their record-setting growth throughout most of fiscal year 1999. The above average market growth during the past year is the primary reason for the success enjoyed by the System again this year in further reducing its unfunded actuarial liabilities. As a result the System is quickly approaching fully funded status.

## Investment Strategies

Under the experienced direction of its Board of Trustees, the System plans to continue following its steady course toward maximizing investment returns while minimizing its exposure to risk. In the months ahead, the System will continue to deploy assets at home as well as throughout the expanding global markets in an effort to maintain an appropriate portfolio balance.

## Major Issues and Initiatives

In May 1998, the System signed a contract for the development and implementation of a fully integrated, state-of-the-art data processing and document management system. During fiscal year 1999, the system development project progressed through the requirements definition phase. At the same time, the System developed, tested and rolled out its document imaging process while converting approximately $10 million of its microfilm files for online retrieval and viewing. With implementation and system integration expected to be completed by the end of fiscal year 2001, the System should be well positioned to enter the 21st century as an industry leader.

In April 1998, the Maryland General Assembly enacted House Bill 987, Chapter 530 of the Acts of 1998 to significantly enhance the benefits available to members of the Teachers' Pension System and State employees who were members of the Employees' Pension System. During its 1999 legislative session, the Maryland General Assembly enacted legislation that extended participating governmental units the option to elect the enhanced benefits for their employees who are Employees' Pension System members.

Effective July 1, 1998, through the cooperative efforts of the Board of Trustees, the Governor's Office and members of the General Assembly, legislation was enacted to enhance the retirement allowances for members of the Teachers Retirement System and State employees who are members of the Employees Retirement System who elected Selection C benefits.

In July 1997, the System embarked on a substantial conversion effort to reprogram all of its existing operational computer programs to become year 2000 compliant. In September 1999, this project was completed.

Effective July 1, 1999, the Maryland General Assembly enacted Senate Bill 141, Chapter 122 of the Acts of 1999 to enhance the retirement allowances for members of the State Police Retirement System. This legislation permits members with at least 22 years of eligibility service to retire with full service retirement allowances computed as 2.55% of average final compensation. In addition, the legislation added a deferred retirement option program (DROP) that will become effective upon approval by the Internal Revenue Service. Under this program, eligible members may elect to retire after 22 years of service and begin accumulating retirement benefits in a DROP account while continuing to work no more than 4 additional years. Finally, eligible State Police retirees were granted an adjustment based on the number of years the retiree has been retired.

## Financial Information

Because System management is responsible for the information contained in this report, we have committed the resources necessary to maintain an internal control structure which provides reasonable assurance that assets are adequately safeguarded and that the financial records are consistently and accurately maintained. Accordingly, we are confident that the financial statements, supporting schedules and statistical tables included in this report fairly present the System's financial condition and the results of its operations in all material respects.

## Accounting System and Reports

The System reports its transactions on the accrual basis of accounting, under which revenues are reported in the accounting period in which they are earned and become measurable and expenses are reported when the related liability is incurred. Investments are reported at fair value at fiscal year end. Investment purchases and sales are reported in the accounting period in which the related trade dates occur.

## Revenues

The reserves necessary to finance retirement allowances and other benefits are accumulated through investment earnings and the collection of employer and member contributions. During fiscal year 1999, investment earnings totaled $2.383 million, while revenues from employer and member contributions were $694 million and $162 million, respectively. For 1999, member contribution rates remained unchanged, while employer rates decreased significantly.

## Expenses

The System's expenses consist of monthly retirement allownces, refunds of contributions to terminated and transferring members and withdrawing employers, and the administrative cost of System operations. As expected, payments to retirees, beneficiaries and transferring or withdrawing members and employers continued to be the System's primary disbursements during 1999, totaling $1,132 million. Of this amount, the System disbursed $1,115.1 million as retirement allowances to members and beneficiaries. The remaining $16.9 million was paid to members and withdrawing employers as a result of employment terminations, system transfers or withdrawal. Administrative and investment expenses are entirely funded through investment income. Of the $182.4 million disbursed during fiscal year 1999 to manage the investment portfolio and to administer the System, $157.7 million was paid for investment management and portfolio custody services while only $24.7 million was used to fund the System's administrative operations.

## Funding and Reserves

Funds, derived from the excess of revenues over expenses, are accumulated by the System in order to meet benefit obligations to both current and future retirees and beneficiaries. The Annotated Code of Maryland requires participating employers to make periodic contributions which, as a level percentage of payroll, will fund the employers' "normal costs" over the members' average active service period, and the System's accrued unfunded liability by the year 2020. Each year the Board of Trustees certifies the required employer contribution rates based on the actuary's annual valuation and recommendations.

At June 30, 1999, the System's actuarial accrued liability was $28.5 billion. With the actuarial value of assets accumulated to pay the liability at $27.6 billion, the System now stands at 97 percent funded. Fiscal year 1999 marked the eighth consecutive year in which the System increased its percentage funded, demonstrating its continuing commitment to meeting the established funding objectives.

## Investments

Of the $2.4 billion in investment earnings for fiscal year 1999, nearly 63 percent ($1.5 billion) was attributable to growth in the investment portfolio. The remaining $883 million represented interest, dividends, securities lending gross income and real estate operating net income.

## Professional Services

The System contracts for the services of various independent consulting, investment advisory and financial professionals to assist the Board in carrying out its fiduciary responsibility to efficiently and effectively manage the System. For example, actuarial services were provided by Milliman & Robertson, Inc. and independent financial statement audit services were provided by the State of Maryland's Office of Legislative Audits. The System's asset custody and portfolio accounting services are provided by the State Street Bank & Trust Company under a multi-year, master custody arrangement. A complete listing of the System's professional consultants and external investment advisors is presented on page 11.

## Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the State Retirement and Pension System of Maryland for its comprehensive annual financial report for the fiscal year ended June 30, 1998. This was the tenth consecutive year (1989 through 1998) the State Retirement and Pension System of Maryland has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

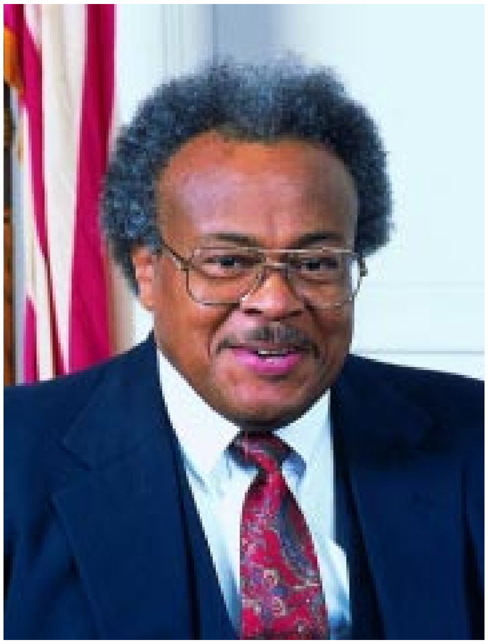
A Certificate of Achievement is valid for a period of one year only. We believe our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

## Acknowledgments

This annual report reflects the dedicated efforts of the System's staff under the steady direction of the Board of Trustees. We extend our sincere gratitude to each member of the Board of Trustees, the Agency's staff, the Board's advisors and the many people who worked so hard to make fiscal year 1999 a success.

Peter Vaughn
Executive Director &
Secretary to the Board

Ricky L. Harrison, CPA
Chief Financial Officer



## Dear Members and Beneficiaries:

On behalf of the Board of Trustees, I am pleased to present the Comprehensive Annual Financial Report on the operations of the State Retirement and Pension System of Maryland for the fiscal year ended June 30, 1999. It was prepared and submitted by the management of the Retirement Agency and accepted by the Board of Trustees on December 14, 1999.

The report is divided into several sections, providing an in-depth review of the financial, actuarial, investment and statistical operations of the System we administer on your behalf.

I would like to share with you several major accomplishments of the System achieved during the year. Assets reached a record level in 1999, reaching $30 billion. This level is nearly three times the assets the System had just ten years ago.

The funding ratio of the combined Systems reached 97% at year-end. This is the highest funding level in the history of the Systems. Additionally, the Employees' combined system is now fully funded for the first time in history.

The unfunded actuarial liability, once as high as $7.6 billion in 1985, has been reduced to $800 million in 1999, well ahead of the funding schedule projected by the Actuary.

After accounting for benefit improvements passed by the General Assembly in 1998, employer contributions have been reduced to the lowest levels in 20 years.

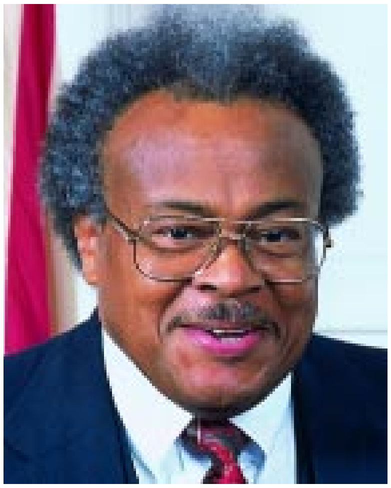
All this translates into increased benefit security to our participants. As Chairman, I will continue to utilize my investment expertise to grow the Systems assets in a prudent fashion in order to provide the promised benefits into the next millennium.

The Board of Trustees continues to administer the System in a prudent fashion with the interests of the participants always in mind.

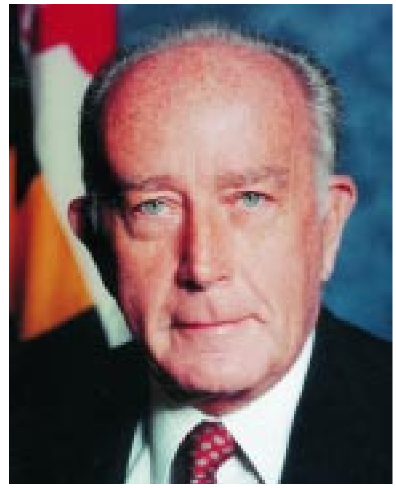
Sincerely,

Richard N. Dixon
State Treasurer
Chairman, Board of Trustees

# Board of Trustees



**Richard N. Dixon, *Chairman***
**State Treasurer**
Ex Officio since February 1, 1996
Member, Investment Committee
Member, Executive Committee



**William Donald Schaefer, *Vice Chairman***
**State Comptroller**
Ex Officio since January 25, 1999
Member, Investment Committee
Member, Real Estate Subcommittee

**Dr. Ali A. Alemi**
August 1, 1999 – July 31, 2003
Member, Executive Committee
Member, Audit Committee

**William D. Brown**
August 1, 1997 – July 31, 2001
Chairman, Executive Committee
Chairman, Audit Committee

**Arthur N. Caple, Jr.**
August 1, 1985 – July 31, 2001
Chairman, Investment Committee

**Frank P. Casula**
February 14, 1986 – June 30, 2002
Chairman, Real Estate Subcommittee
Member, Investment Committee

**Dr. Nancy S. Grasmick**
Ex Officio since September 16, 1991
Member, Executive Committee

**G. Bruce Harrison**
August 1, 1997 – July 31, 2001
Member, Investment Committee
Member, Audit Committee

# Board of Trustees

**Debra B. Humphries**
July 1, 1997 – June 30, 2001
Member, Investment Committee

**Major Morris L. Krome**
August 1, 1998 – July 31, 2002
Vice Chairman, Executive Committee

**Carl D. Lancaster**
August 1, 1987 – July 31, 2003
Vice Chairman, Investment Committee
Member, Real Estate Subcommittee

**Col. David B. Mitchell**
Ex Officio since January 18, 1995
Member, Executive Committee

**Frederick W. Puddester**
Ex Officio since June 3, 1996
Member, Investment Committee

**George R. Tydings**
May 31, 1994 – June 30, 2003
Member, Investment Committee

# Public Advisors to the Investment Committee

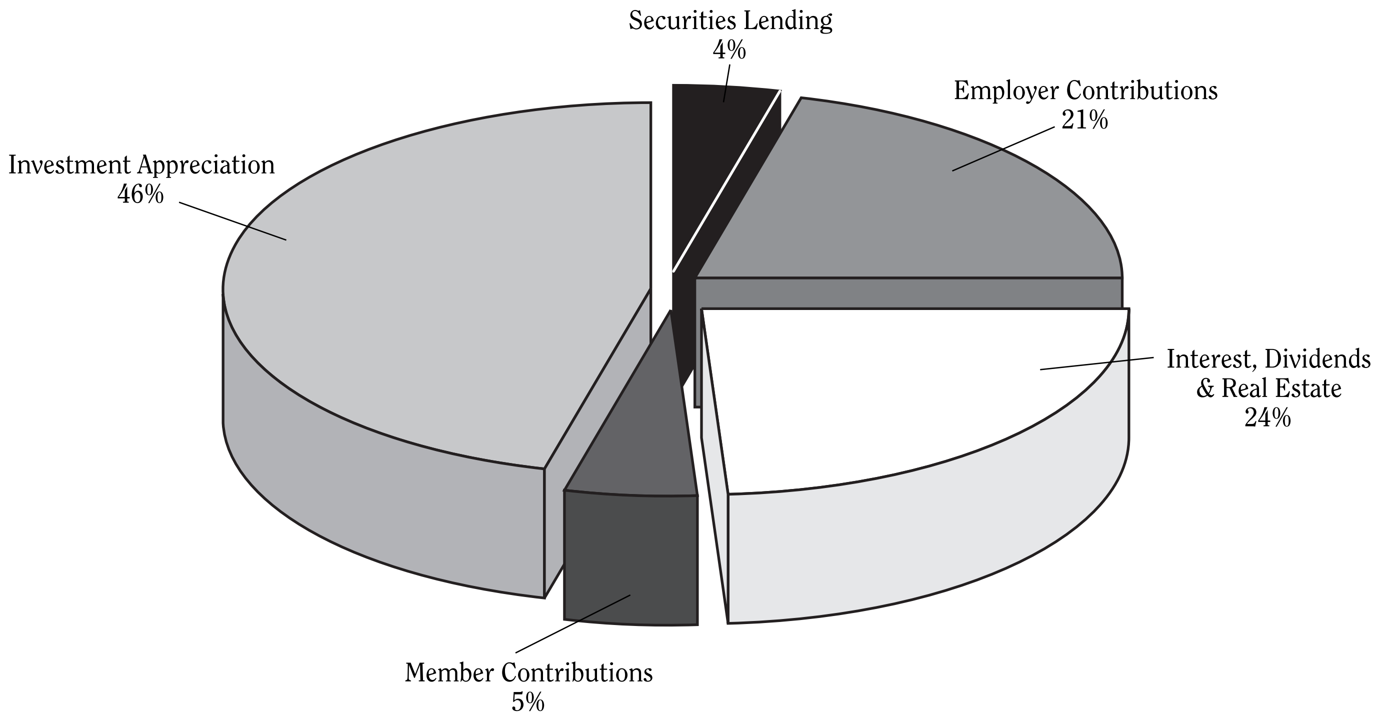
**Howard P. Colhoun**

**Wayne H. Shaner**

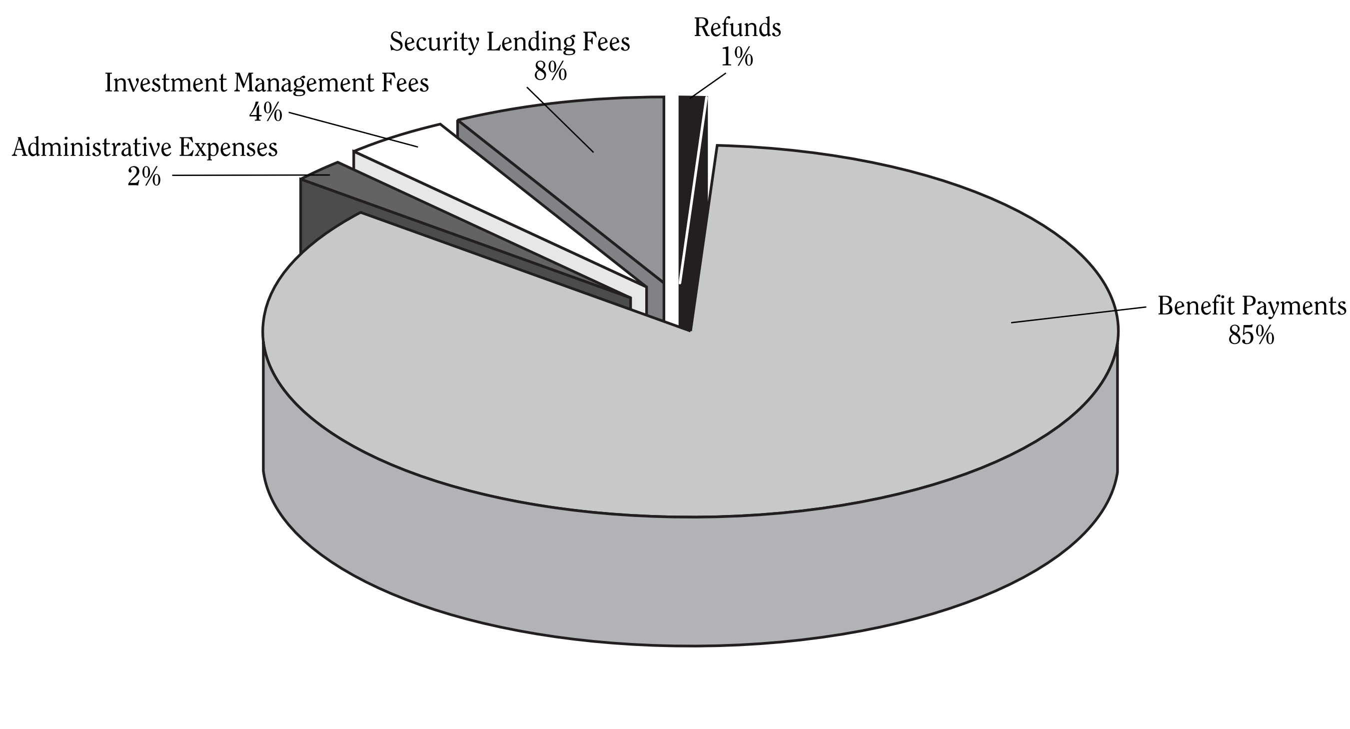
**Robert H. Patzwall, Jr.**

# Sources and Uses of Plan Resources
## for the Year Ended June 30, 1999

## Sources




## Uses



# Combined Statements of Changes in Plan Net Assets
## for the Fiscal Years Ended June 30, 1999 and 1998
*(Expressed in Thousands)*

| | 1999 | 1998 |
|---|---|---|
| **Additions:** | | |
| **Contributions** (note 4): | | |
| Employers | **$ 252,337** | $ 262,404 |
| Members | **162,342** | 78,609 |
| Other | **441,016** | 473,384 |
| Total contributions | **855,695** | 814,397 |
| **Investment income:** | | |
| Net appreciation in fair value of investments | **1,500,247** | 3,053,219 |
| Interest | **485,792** | 485,031 |
| Dividends | **264,351** | 266,305 |
| Income from securities lending activity | **118,311** | 155,288 |
| Real estate operating net income | **14,355** | 13,507 |
| Total investment income | **2,383,056** | 3,973,350 |
| Less investment expenses (note 2f) | **(157,658)** | (191,113) |
| Net investment income | **2,225,398** | 3,782,237 |
| **Total additions** | **3,081,093** | 4,596,634 |
| **Deductions:** | | |
| Benefit payments | **1,115,086** | 1,047,774 |
| Refunds (note 5) | **16,898** | 20,007 |
| Administrative expenses (note 2f) | **24,742** | 10,441 |
| **Total deductions** | **1,156,726** | 1,078,222 |
| **Net increase in plan assets** | **1,924,367** | 3,518,412 |
| **Net assets held in trust for pension benefits:** | | |
| Beginning of the fiscal year | **28,061,182** | 24,542,770 |
| End of the fiscal year | **$ 29,985,549** | $ 28,061,182 |

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

# Notes to the Combined Financial Statements

## 1. General Description of the System

### a. Organization

The State Retirement Agency (the "Agency") is the administrator of the State Retirement and Pension System of Maryland (the "System"), an agent multiple-employer public employee retirement system. The System was established by the State Personnel and Pensions Article of the Annotated Code of Maryland to provide retirement allowances and other benefits to State employees, teachers, police, judges, legislators and employees of participating governmental units. Responsibility for the System's administration and operation is vested in a 14-member Board of Trustees.

The State of Maryland is the statutory guarantor for the payment of all pensions, annuities, retirement allowances, refunds, reserves and other benefits of the System. The Agency is legally authorized to use all assets accumulated for the payment of benefits to pay such obligations to any plan member or beneficiary as defined by the terms of the plan. Consequently, the System is accounted for as a single plan as defined in Governmental Accounting Standards Board (GASB) Statement No. 25, "*Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*." Additionally, the System is fiscally dependent on the State by virtue of the legislative and executive controls exercised with respect to its operations, policies and administrative budget. Accordingly, the System is included in the State's reporting entity and disclosed in its financial statements as a pension trust fund.

The System comprises the Teachers' Retirement and Pension Systems, Employees' Retirement and Pension Systems, State Police Retirement System, Judges' Retirement System, Law Enforcement Officers' Pension System and the Local Fire and Police System.

### b. Covered Members

The Teachers' Retirement System was established on August 1, 1927 to provide retirement allowances and other benefits to teachers in the State. Effective January 1, 1980, the Teachers' Retirement System was closed to new members and the Teachers' Pension System was established. As a result, teachers hired after December 31, 1979, become members of the Teachers' Pension System as a condition of employment. Members remaining in the Teachers' Retirement System have the opportunity to irrevocably elect to transfer to the Teachers' Pension System. For those transferring, all prior service credit and member contributions on earnings above the social security wage base are transferred from the Teachers' Retirement System to the Teachers' Pension System, with member contributions on earnings up to the social security wage base being refunded (see note 5).

On October 1, 1941, the Employees' Retirement System was established to provide retirement allowances and other benefits to State employees, elected and appointed officials and the employees of participating governmental units. Effective January 1, 1980, the Employees' Retirement System was essentially closed to new members and the Employees' Pension System was established. As a result, State employees (other than correctional officers) and employees of participating governmental units hired after December 31, 1979, become members of the Employees' Pension System as a condition of employment while all State correctional officers and members of the Maryland General Assembly continue to be enrolled as members of the Employees' Retirement System. State employees and employees of participating governmental units remaining in the Employees' Retirement System have the opportunity to irrevocably elect to transfer to the Employees' Pension System. For those transferring, all prior service credit and member contributions on earnings above the social security wage base are transferred from the Employees' Retirement System to the Employees' Pension System with member contributions on earnings up to the social security wage base being refunded (see note 5). Currently, 124 governmental units participate in the Employees' Systems.

The State Police Retirement System was established on July 1, 1949 to provide retirement allowances and other benefits to any police employee or cadet of the Maryland State Police.

The Judges' Retirement System was established on June 30, 1969 to provide retirement allowances and other benefits for State and local, appointed or elected judges.

The Law Enforcement Officers' Pension System was established on July 2, 1990 to provide retirement allowances and other benefits for certain State and local law enforcement officers. Currently, only those officers employed by the Department of Natural Resources, the Maryland Investigative Services Unit and the Maryland Transportation Authority Police Force as well as deputy sheriffs employed by the Baltimore City Sheriff's Department are eligible to participate. This System includes both retirement plan and pension plan provisions which are applicable to separate portions of this System's membership. The retirement plan provisions are only applicable to those members who, on the date they elected to participate in this System, were members of the Employees' Retirement System. This System's pension plan provisions are applicable to all other participating law enforcement officers.

The Local Fire and Police System was established on July 1, 1989 to provide retirement allowances and other benefits for law enforcement officers and fire fighters employed by participating governmental units. This System includes both retirement plan and pension plan provisions which are applicable to separate portions of this System's membership. The retirement plan provisions are only applicable to those officers and fire fighters who, on the date they elected to participate in this System, were members of the Employees' Retirement System. This System's pension plan provisions are applicable to all other participating governmental unit law enforcement officers and fire fighters.

The following table presents a summary of membership by system as of June 30, 1999, with comparative 1998 totals:

| | Retirees & | Active Plan Participants | | |
|---|---|---|---|---|
| | **Beneficiaries*** | **Vested** | **Non-vested** | **Total** |
| Teachers' Retirement & Pension Systems | 51,267 | 61,393 | 27,228 | 88,621 |
| Employees' Retirement & Pension Systems | 64,032 | 57,980 | 25,103 | 83,083 |
| Judges' Retirement System | 297 | 283 | — | 283 |
| State Police Retirement System | 1,315 | 1,298 | 349 | 1,647 |
| Local Fire and Police System | 32 | 128 | 50 | 178 |
| Law Enforcement Officers' Pension System | 200 | 706 | 156 | 862 |
| Totals as of June 30, 1999 | 117,143 | 121,788 | 52,886 | 174,674 |
| Totals as of June 30, 1998 | 111,815 | 125,620 | 45,043 | 170,663 |

* *Includes all retirees and beneficiaries currently receiving benefits as well as terminated employees entitled to benefits but who are not yet receiving them.*

**c. Summary of Significant Plan Provisions**

All plan benefits are specified by the State Personnel and Pensions Article of the Annotated Code of Maryland. Retirement allowances are computed using both the highest three years' average final salary (AFS) and the actual number of years of accumulated creditable service. Pension allowances are computed using both the highest three consecutive years' AFS and the actual number of years of accumulated creditable service. Various retirement options are available under each system which ultimately determine how a retiree's benefit allowance will be computed. Some of these options require actuarial reductions based on the retiree's or designated beneficiary's attained age and similar actuarial factors. A brief summary of the retirement eligibility requirements of, and the benefits available under, the various systems follows:

**Service Retirement Allowances**

A member of either the Teachers' or Employees' Retirement System is generally eligible for full retirement benefits upon the earlier of attaining age 60 or accumulating 30 years of eligibility service regardless of age. The annual retirement allowance equals 1/55 (1.8%) of the member's AFS multiplied by the number of years of accumulated creditable service.

A member of either the Teachers' or Employees' Pension System is eligible for full retirement benefits upon the earlier of attaining age 62, with specified years of eligibility service, or accumulating 30 years of eligibility service regardless of age. Generally, the annual pension allowance for either a member of the Teachers' Pension System or a State employee member of the Employees' Pension System equals 1.2% of the member's AFS, multiplied by the number of years of creditable service accumulated prior to July 1, 1998, plus 1.4% of the member's AFS, multiplied by the number of years of creditable service accumulated subsequent to June 30, 1998. The annual pension allowance for a participating governmental unit employee who is a member of the Employees' Pension System equals 0.8% of the member's AFS up to the social security integration level (SSIL), plus 1.5% of the member's AFS in excess of the SSIL, multiplied by the number of years of accumulated creditable service. For the purpose of computing pension allowances, the SSIL is the average of the social security wage bases for the 35 calendar years ending with the year the retiree separates from service.

A member of the State Police Retirement System is eligible for full retirement benefits upon the earlier of attaining age 50 or accumulating 25 years of eligibility service regardless of age. The annual retirement allowance equals 1/45 (2.2%) of the member's AFS multiplied by the number of years of accumulated creditable service up to 25 years, plus 1/90 (1.1%) of the member's AFS multiplied by the number of years of accumulated creditable service in excess of 25 years.

A member of the Judges' Retirement System is eligible for full retirement benefits upon attaining age 60. The annual retirement allowance for a member with at least 16 years of accumulated creditable service equals 2/3 (66.7%) of the salary of an active judge holding a comparable position. The annual retirement allowance is prorated if the member retires with fewer than 16 years of accumulated creditable service.

A member of the Law Enforcement Officers' Pension System is eligible for full retirement benefits upon the earlier of attaining age 50 or accumulating 25 years of eligibility service regardless of age. The annual retirement allowance for a member who is covered under the retirement plan provisions equals 1/50 (2.0%) of the member's AFS multiplied by the number of years of accumulated creditable service up to 30 years, plus 1/100 (1.0%) of the member's AFS multiplied by the number of years of accumulated creditable service in excess of 30 years. The annual pension allowance for a member who is covered under the pension plan provisions equals 1.0% of the member's AFS up to the SSIL, plus 1.7% of the member's AFS in excess of the SSIL, multiplied by the number of years of accumulated creditable service. A member retiring prior to age 62 receives a service pension allowance of 1.7% of the member's AFS for each year of accumulated creditable service, until attaining age 62.

A member of the Local Fire and Police System who is covered under the retirement plan provisions is eligible for full retirement benefits upon the earlier of attaining age 60 or accumulating 25 years of eligibility service regardless of age. The annual retirement allowance equals 1/50 (2.0%) of the member's AFS multiplied by the number of years of accumulated creditable service up to 30 years, plus 1/100 (1.0%) of the member's AFS multiplied by the number of years of accumulated creditable service in excess of 30 years. A member who is covered under the pension plan provisions is eligible for full pension benefits upon the earlier of attaining age 62 or accumulating 25 years of eligibility service regardless of age. The annual pension allowance equals 1.0% of the member's AFS up to the SSIL, plus 1.5% of the member's AFS in excess of the SSIL, multiplied by the number of years of accumulated creditable service.

### Vested Allowances

Any member (other than a judge) who terminates employment before attaining retirement age but after accumulating 5 years of eligibility service is eligible for a vested retirement allowance. Judges have no minimum service requirements prior to vesting. A member who terminates employment prior to attaining retirement age and before accumulating 5 years of eligibility service receives a refund of all member contributions and interest.

### Early Service Retirement

A member of either the Teachers' or Employees' Retirement System may retire with reduced benefits after completing 25 years of eligibility service. Benefits are reduced by 0.5% per month for each month remaining until the retiree either attains age 60 or would have accumulated 30 years of eligibility service, whichever is less. The maximum reduction for a Teachers' or Employees' Retirement System member is 30%. A member of either the Teachers' or Employees' Pension System may retire with reduced benefits upon attaining age 55 with at least 15 years of eligibility service. Benefits are reduced by 0.5% per month for each month remaining until the retiree attains age 62. The maximum reduction for a Teachers' or Employees' Pension System member is 42%. Members of the State Police, Judges', Law Enforcement Officers' and Local Fire and Police Systems are not eligible for early service benefits.

### Disability and Death Benefits

Generally, a member covered under retirement plan provisions who is permanently disabled after 5 years of service receives a service allowance based on a minimum percentage (usually 25%) of the member's AFS. A member covered under pension plan provisions who is permanently disabled after accumulating 5 years of eligibility service receives a service allowance computed as if service had continued with no change in salary until the retiree attained age 62. A member (other than a member of the Maryland General Assembly or a judge, both of which are ineligible for accidental disability benefits) who is permanently and totally disabled as the result of an accident occurring in the line of duty receives 2/3 (66.7%) of the member's AFS plus an annuity based on all member contributions and interest. Death benefits are equal to a member's annual salary as of the date of death plus all member contributions and interest.

### Adjusted Retirement Allowances

Retirement and pension allowances are increased annually to provide for changes in the cost of living according to prescribed formulae. Generally, such adjustments for retirees are based on the annual change in the consumer price index. However, for Teachers' Pension System retirees and retired State employees who were members of the Employees' Pension System the pension allowance adjustments are limited to 3% of the preceding year's allowance. Annual increases to pension allowances for retired participating governmental unit employees who were members of the Employees' Pension System are limited to 3% of the initial allowance. Retirement allowances for legislators and judges are recalculated when the salary of an active member holding a comparable position is increased.

### Pension Changes

Legislation enacted during the 1998 legislative session changed certain provisions of the Teachers' and Employees' Pension Systems. These changes, which were effective July 1, 1998, were mandatory for all current and future Teachers' Pension System members and Employees' Pension System members who are State employees. This law requires members to contribute 2% of earnable compensation, modifies the calculation of the annual pension allowance under a service retirement and allows for a maximum cost of living adjustment of 3% of the preceding year's allowance.

Legislation enacted during the 1999 legislative session granted each of the active participating governmental units the option of offering its employees the aforementioned enhanced pension benefits. Participating governmental units must properly elect to offer the enhanced pension benefits during the statutory election period beginning July 1, 1999 and ending December 31, 1999. The election, once made, will be effective retroactive to July 1, 1998 for all affected members.

As of June 30, 1999, the Agency could not reliably estimate either the number of participating governmental units that would ultimately elect to provide the enhanced benefits or the resulting increase in the

System's actuarial accrued liability. Consequently, the June 30, 1999 actuarial accrued liability disclosed in the System's Schedule of Funding Progress (see page 26) was computed without regard to the potential effects of the 1999 legislation. The effect of this legislation on the System's actuarial accrued liability is potentially significant. In this regard, if all of the eligible employers elect to provide the enhanced pension benefits, it is estimated that the actuarial accrued liability as of June 30, 1999 could increase by as much as $184.5 million. The participating governmental units that elect to provide the enhanced benefits are responsible for funding the additional accrued liability.

## 2. Summary of Significant Accounting Policies

### a. Basis of Accounting

The System's combined financial statements are prepared on the accrual basis of accounting. Accordingly, investment purchases and sales are recorded as of their respective trade dates and all contributions, benefits and refunds are recognized in the period when due. The System has selected the option to apply all applicable GASB pronouncements and only Financial Accounting Standards Board Statements and Interpretations, Accounting Principles Board Opinions and Accounting Research Bulletins issued on or before November 30, 1989.

### b. Investment Limitations

The State Personnel and Pensions Article of the Annotated Code of Maryland authorizes the System to invest plan assets in stocks, bonds, notes, certificates of indebtedness, mortgage notes, real estate, debentures or other obligations, subject to the terms, conditions, limitations and restrictions imposed by the Board of Trustees of the State Retirement and Pension System of Maryland. As such, no more than 25% of the assets invested in common stocks may be invested in non-dividend paying common stocks. In addition, no investment in any one organization may constitute more than 5% of the net plan assets available for pension benefits. The System did not exceed either of these investment limits and did not maintain investments in, loans to or leases with parties related to the System.

### c. Portfolio Valuation Method

The System's investments are reported at fair value. For fixed income securities, fair value is based on quoted market prices provided by independent pricing services. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Mortgages and mortgage related securities are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. Fair value for real estate investments is based on estimated current values and independent appraisals. Fair value for venture capital investments, alternative investments and mutual funds (other than those funds traded on a national or international exchange) is based on information provided by the applicable fund managers.

### d. Securities Lending

The System's investment policies, as approved by the Board of Trustees, permit the System's custodian bank to lend System securities to broker-dealers and other entities. During fiscal year 1999, the System's custodian bank loaned securities of the type on loan at year-end for collateral in the form of cash (see note 3b), other securities, or letters of credit of at least 102% of the fair value of domestic securities and international fixed income securities and 105% of the fair value of international equity securities. Collateral is marked-to-market daily. If the market value of the pledged collateral falls below the specified levels, additional collateral is required to be pledged by the close of the next business day. Each such loan was executed with a simultaneous agreement to return the collateral for the same securities in the future. Securities on loan at year-end for cash collateral are presented as uncategorized in the schedule of custodial credit risk (see note 3). Securities on loan at year-end for collateral other than cash are categorized according to the custodial credit risk category applicable to the collateral received. In the event of a borrower's default, the System's custodial bank is obligated to indemnify the System if, and to the extent that, the fair value of collateral is insufficient to replace the loaned securities. Similarly, in the event of a borrower's failure to remit income distributions declared by the issuers of securities on loan, the System's custodial bank is obligated to indemnify the System for any portion of such distributions not recoverable from the borrower's collateral. The System has not experienced any loss due to credit or market risk on security lending activity since inception of the program. Further, as of June 30, 1999, the System had no credit risk exposure to borrowers because the fair value of collateral held exceeded the fair value of securities loaned.

Although the average term of the System's security loans is one week, each loan can be terminated at will by either the System or the borrower. Cash collateral is invested in two of the lending agent's short-term investment pools, which at June 30, 1999 had interest rate sensitivity durations of sixty-eight and sixty-one days. Because the relationship between the maturities of the investment pools and the System's security loans is affected by the maturities of the loans made by other entities that use the agent's pools, the System cannot match maturities. The System cannot pledge or sell collateral securities received until and unless a borrower defaults. Investments made with cash received as collateral and the corresponding liabilities are reported in the Combined Statements of Plan Net Assets.

At June 30, 1999, the fair value of loaned securities and the related collateral were as follows *(expressed in thousands)*:

| | Fair Value | Collateral | Percent Collateralized |
|---|---|---|---|
| International equity securities | $ 669,604 | $ 704,708 | 105.2 % |
| Domestic & international fixed securities | 1,278,313 | 1,302,049 | 101.9 |
| Total | $ 1,947,917 | $ 2,006,757 | |

**e. Derivatives**

The System may invest in derivatives as permitted by guidelines established by the Board of Trustees. Compliance with these guidelines is monitored by Agency staff. Pursuant to such authority, the System invests in foreign currency forward contracts, options, futures, collateralized mortgage obligations, mortgage related securities, interest-only and principal-only securities. No derivatives were purchased with borrowed funds.

Derivatives are generally used to hedge against foreign currency risk and changes in interest rates, improve yield and adjust the duration of the System's fixed income portfolio. These securities are subject to changes in value due to changes in interest rates or currency valuations. Additionally, mortgage related securities are subject to prepayment risk when interest rates are falling. Credit risk for derivatives results from the same considerations as other counterparty risk assumed by the System, which is the risk that the counterparty might be unable to meet its obligations.

The System invests in foreign currency forward contracts to hedge the currency risk in its international and global portfolios. Because the fair value of foreign currency forward contracts is not included in the fair value of investments reported on the Combined Statements of Plan Net Assets, the following schedule is presented to summarize the fair value of all foreign currency forward contracts outstanding as of June 30, 1999 *(expressed in thousands)*:

| Purchases | | | Sales | | |
|---|---|---|---|---|---|
| Currency | Amount (local currency) | Fair Value | Currency | Amount (local currency) | Fair Value |
| Australian dollar | 140,486 | $ 93,049 | Australian dollar | 65,030 | $ 43,068 |
| Canadian dollar | 28,473 | 19,248 | Canadian dollar | 50,764 | 34,317 |
| Danish krone | 19,602 | 2,734 | Danish krone | 161,594 | 22,536 |
| Euro currency | 195,660 | 202,601 | Euro currency | 213,874 | 221,311 |
| Japanese yen | 17,635,006 | 146,577 | Japanese yen | 60,810,838 | 506,252 |
| New Zealand dollar | 6,647 | 3,525 | New Zealand dollar | 26,593 | 14,101 |
| Norwegian krone | 23,076 | 2,927 | Norwegian krone | 90,748 | 11,522 |
| Pound sterling | 39,970 | 63,023 | Pound sterling | 202,153 | 318,756 |
| Swedish krona | 449,803 | 53,118 | Swedish krona | 120,100 | 14,167 |
| Swiss franc | 96,670 | 62,505 | Swiss franc | 119,046 | 76,914 |
| U.S. dollar | 1,258,902 | 1,258,902 | U.S. dollar | 643,614 | 643,614 |
| Total purchases | | $ 1,908,209 | Total sales | | $ 1,906,558 |

**f. Administrative and Investment Expenses**

All of the System's administrative and investment expenses (e.g., salaries of Agency employees, investment advisory fees) are incurred centrally and charged to each individual retirement or pension system on the basis of its percentage ownership in the System's net assets. All of the System's administrative and investment expenses are funded from investment income. See pages 29 and 30 for detailed schedules of administrative and investment expenses, respectively.

**g. Federal Income Tax Status**

During the fiscal years ended June 30, 1999 and 1998, the System qualified under Section 401(a) of the Internal Revenue Code and was exempt from federal income taxes under Section 501(a) of the Code.

**h. Reclassifications**

Certain reclassifications were made to the 1998 financial statements to conform to the 1999 financial statement presentation.

## 3. Cash Deposits and Investments

Cash and cash equivalents totaled $943,107,000 and $1,667,035,000 as of June 30, 1999 and 1998, respectively. Included as cash equivalents for financial statement presentation purposes were certain short-term investments (e.g., commercial paper, repurchase agreements) which are categorized in note 3b for custodial credit risk purposes as investments. These cash equivalent investments totaled $897,070,000 and $1,616,730,000 as of June 30, 1999 and 1998, respectively.

### a. Cash Deposits

Cash deposits are categorized to give an indication of the level of custodial credit risk assumed by the System. Category 1 includes deposits insured or collateralized with securities held by the System or its agent in the System's name. Category 2 includes deposits collateralized with securities held by the pledging financial institution's trust department or agent in the System's name. Category 3 includes deposits which are uncollateralized. As of June 30, 1999, the carrying amount of both the System's uninsured and uncollateralized deposits and bank balance was $46,037,000 and is included as Category 3.

### b. Investments

The System's investments are categorized to give an indication of the level of custodial credit risk assumed by the System. Category 1 includes investments insured or registered or for which the securities are held by the System's custodian bank in the System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by a counterparty's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by a counterparty, its trust department or its agent, but not in the System's name.

All of the System's investments meet the criteria of Category 1 except for investments in mutual funds, real estate, mortgages, venture capital, alternative investments, collateral for securities on loan and global pooled short-term investments which are not categorized because they are not evidenced by securities that exist in physical or book entry form.

The following table presents a summary of the System's investments, by category of custodial credit risk as of June 30, 1999, with comparative 1998 totals *(expressed in thousands)*:

| | | Carrying Value | |
|---|---|---|---|
| | **Category 1** | **1999** | **1998** |
| **Investments** | | | |
| Commercial paper | $ 285,410 | $ 285,410 | $ 836,741 |
| Repurchase agreements | 10,354 | 10,354 | 9,031 |
| U.S. Governinent obligations | 1,968,024 | 1,968,024 | 1,478,300 |
| Domestic corporate obligations | 2,390,075 | 2,390,075 | 2,382,285 |
| Mortgage related securities | 2,295,599 | 2,295,599 | 2,565,014 |
| Domestic stocks | 10,201,558 | 10,201,558 | 11,065,230 |
| International obligations | 543,857 | 543,857 | 531,038 |
| International stocks | 4,142,311 | 4,142,311 | 3,854,395 |
| **Total investments to be categorized** | $ 21,837,188 | 21,837,188 | 22,722,034 |
| Mutual funds | | 5,273,255 | 2,110,854 |
| Real estate | | 611,986 | 474,969 |
| Mortgages | | 4,150 | 4,711 |
| Alternative investments | | 809 | — |
| Venture capital | | 5,866 | 9,894 |
| Global pooled short-term investments | | 601,306 | 770,958 |
| Investments held by borrowers under securities loans with cash collateral: | | | |
| U.S. Government obligations | | 820,294 | 893,741 |
| Domestic corporate obligations | | 41,700 | 29,161 |
| Domestic stocks | | 298,388 | 529,547 |
| International obligations | | 12,763 | 62,285 |
| International stocks | | 661,412 | 823,345 |
| Collateral for loaned securities | | 1,891,273 | 2,419,590 |
| **Total invested assets** | | $ 32,060,390 | $ 30,851,089 |

## 4. Contributions

The State Personnel and Pensions Article requires both active members and their respective employers to make contributions to the System. Rates for required contributions by active members are established by law. Members of the Teachers' and Employees' Retirement Systems are required to contribute 7% or 5% of earnable compensation depending upon the retirement option selected. Members of the State Police and Judges' Retirement Systems are required to contribute 8% and 6% of earnable compensation, respectively. Members of the Teachers' Pension System and State employees who are members of the Employees' Pension System are required to contribute 2% of earnable compensation. Participating governmental unit employees who are members of the Employees' Pension System are required to contribute 5% of earnable compensation in excess of the social security taxable wage base.

Contribution rates for employer and other "non-employer" contributing entities are established by annual actuarial valuations using the entry age normal cost method with projection and other actuarial assumptions adopted by the Board of Trustees. These contribution rates have been established as the rates necessary to fund normal costs and amortize the unfunded actuarial accrued liability over a 40-year period (as provided by law) from July 1, 1980.

The State of Maryland (which is also a non-employer contributor to the Teachers' Retirement and Pension Systems and the Judges' Retirement System), the Maryland Automobile Insurance Fund, the Injured Workers' Insurance Fund and 124 participating governmental units make all of the employer and other (non-employer) contributions to the System.

## 5. Refunds

Member contributions plus interest may be refunded to a member who withdraws from the System, or to the designated beneficiary following a member's death. In addition, members of the Teachers' and Employees' Retirement Systems who elect to transfer to the corresponding pension system receive refunds of all or part (if earnings have been greater than the social security taxable wage base) of their contributions plus interest. That portion of any member's contributions not refunded is transferred with credited interest to the applicable pension system. Employer contributions may also be refunded with interest to any participating governmental unit electing to withdraw from the System. For the fiscal years ended June 30, 1999 and 1998, refunds to members and withdrawing employers were as follows (*expressed in thousands*):

| | 1999 | 1998 |
|---|---|---|
| Member refunds | $ 12,634 | $ 14,350 |
| Employer refunds | 4,264 | 5,657 |
| Total refunds | $ 16,898 | $ 20,007 |

## 6. Year 2000 Computer Issue

Over the years, certain computer programs have been written and computer components designed using two digits rather than four to define the applicable year, which could result in the computer recognizing the date using "00" as the year 1900 rather than the year 2000. This situation, which could result in major system failures or miscalculations, is generally referred to as the "Year 2000" problem. The Agency has commenced a process to identify and address Year 2000 compliance with respect to all of its hardware, software and peripheral equipment that is potentially date dependent. This process, which is administered by the Agency's Information Systems Division, involves four phases.

*Phase I – Awareness Stage.* This phase encompasses establishing a budget and project plan for dealing with the Year 2000 issue.

*Phase II – Assessment Stage.* This phase begins with identifying all of the Agency's systems and individual components of those systems, then identifying its mission-critical systems and equipment, and checking for compliance.

*Phase III – Remediation Stage.* This phase comprises making technical changes to existing systems and equipment or switching to new compliant systems. During this stage, decisions are made on how to address Year 2000 system or equipment issues.

*Phase IV – Validation / Testing Stage.* This phase validates and tests the changes made during the remediation stage. This stage includes developing test scripts and test data, running test scripts and reviewing test results.

As of June 30, 1999, the Agency was in the remediation stage. As such, the Agency had established a budget and project plan, assessed the extent of its Year 2000 exposure and was in the process of converting the non-compliant software and electronic equipment to be Year 2000 compliant. After these changes are made, the Agency will validate and test the converted software and electronic equipment.

The Agency's Year 2000 preparedness plan is built primarily on a technology remediation approach. However, a critical secondary component of the Agency's total Year 2000 solution is the development of contingency plans to ensure continued operation in the event of critical automated systems failure or unforeseen supply chain interruptions. Contingency plans describe the steps to be taken, including the activation of manual or outsourced processes, to ensure that essential operations continue in the event of a Year 2000 induced system failure. To coordinate its Year 2000 contingency planning efforts, the Agency designated a Year 2000 risk management team including information systems, financial management and retirement operations personnel. This team, under the direction of a Risk Management Coordinator, has identified the Agency's mission-critical systems, processes and equipment potentially affected by the Year 2000 problem. As of June 30, 1999, the Agency was in the process of assessing the likelihood of a Year 2000 induced system failure and the impact of such a failure. Once this assessment has been made, the Agency will plan the necessary steps to ensure the uninterrupted continuation of essential Agency operations.

Because of the unprecedented nature of the Year 2000 issue, its effects and the ultimate success of related remediation efforts will not be fully determinable until January 1, 2000 and thereafter. Management cannot assure that the Agency is or will be Year 2000 compliant, that the Agency's remediation efforts will be successful in whole or in part, or that parties with whom the Agency does business will be Year 2000 compliant by the end of calendar year 1999. However, the Agency has allocated approximately $2 million, as well as significant personnel resources, to address the Year 2000 issue and expects to resolve its Year 2000 problems prior to December 31, 1999. The Agency expects that minor problems may remain after December 31, 1999, and will be addressed as they occur. The Agency does not expect Year 2000 problems to have a material adverse effect on its financial health or its ability to meet its financial obligations in a timely manner.

# Required Supplementary Information

## Schedule of Funding Progress

*(Expressed in Thousands)*

| Actuarial Valuation Date June 30, | Actuarial Value of Assets a | Actuarial Accrued Liability (AAL) b | Unfunded AAL (UAAL) (b - a) | Funded Ratio (a / b) | Covered Payroll c | UAAL as a Percentage of Covered Payroll [(b - a) / c] |
|---|---|---|---|---|---|---|
| 1991 | $ 13,400,926 | $ 19,767,885 | $ 6,366,959 | 67.79 % | $ 5,093,708 | 125 % |
| 1992 | 14,381,367 | 20,002,773 | 5,621,406 | 71.90 | 5,023,781 | 112 |
| 1993 | 15,684,924 | 21,175,256 | 5,490,332 | 74.07 | 5,064,529 | 108 |
| 1994 | 16,272,577 | 21,875,463 | 5,602,886 | 74.39 | 5,246,249 | 107 |
| 1995 | 17,666,582 | 23,092,537 | 5,425,955 | 76.50 | 5,532,150 | 98 |
| 1996 | 19,455,280 | 24,240,883 | 4,785,603 | 80.26 | 5,640,834 | 85 |
| 1997 | 21,920,696 | 25,383,206 | 3,462,510 | 86.36 | 5,657,385 | 61 |
| 1998 | 24,850,355 | 27,416,935 | 2,566,580 | 90.64 | 6,148,300 | 42 |
| 1999 | 27,646,579 | 28,475,380 | 828,801 | 97.09 | 6,388,973 | 13 |

## Schedule of Contributions from Employers and Other Contributing Entity

*(Expressed in Thousands)*

| Fiscal Year Ended June 30, | Annual Required Contributions | Percentage Contributed |
|---|---|---|
| 1991 | $ 633,995 | 100 % |
| 1992 | 659,128 | 100 |
| 1993 | 667,553 | 100 |
| 1994 | 657,429 | 100 |
| 1995 | 689,342 | 100 |
| 1996 | 721,615 | 100 |
| 1997 | 740,258 | 100 |
| 1998 | 735,788 | 100 |
| 1999 | 693,353 | 100 |

# Notes to the Required Supplementary Information

## 1. Description of Schedule of Funding Progress

The Schedule of Funding Progress summarizes the actuarial value of the System's assets and actuarial accrued liability as of June 30, 1999 and each of the eight preceding fiscal years. The data presented in the schedule were obtained from the System's independent actuary's annual valuation report for each year presented.

The schedule is presented to provide a consistent basis for measuring the System's annual progress toward funding its actuarial accrued liability in accordance with its actuarial funding method. The primary measure of funding progress is the System's funded ratio (i.e., actuarial value of assets expressed as a percentage of the actuarial accrued liability). An increase in the funded ratio indicates improvement in the System's ability to pay all projected benefits as they become due. During the year ended June 30, 1999, the System's funded ratio increased from 90.64 percent to 97.09 percent.

The Schedule of Funding Progress also discloses the relationship between the System's covered payroll (i.e., all elements included in compensation paid to active members on which contributions are based) and the unfunded portion of its actuarial accrued liability. This relationship, expressed as a ratio, is a measure of the significance of the unfunded actuarial accrued liability relative to the capacity to pay all contributions required to fund the liability. A decrease in this ratio indicates improvement in the System's strength. During the year ended June 30, 1999, the System's ratio of the unfunded actuarial accrued liability to its covered payroll decreased from 42 percent to 13 percent.

## 2. Actuarial Methods and Assumptions

### a. Funding Method

The System uses the entry age normal cost method with projection to determine the actuarial accrued liability on which future employer contribution rates will be based. Under this funding method, a total contribution rate is determined which consists of two elements, the normal cost rate and the unfunded actuarial liability rate.

The unfunded actuarial accrued liability is being amortized, as a level percentage of projected payroll, over a closed 40-year period (as provided by law). The liquidation period for the unfunded actuarial accrued liability is 21 years from June 30, 1999.

### b. Asset Valuation Method

Assets are valued for funding purposes using a simplified three-year moving average. Under this method, the year end actuarial asset value equals 1/3 of the current fiscal year end fair value, as reported in the combined financial statements, plus 2/3 of the "expected market value". For purposes of this calculation, the "expected market value" is the preceding fiscal year's actuarial asset value, adjusted for the current fiscal year's cash flows with interest accumulated at the actuarial assumed rate of return on investments.

### c. Actuarial Assumptions

The assumptions used for the actuarial valuation were recommended by the System's independent actuary, based upon periodic analyses of the System's experience, and adopted by the Board of Trustees. Differences between assumed and actuarial experience (i.e., actuarial gains and losses) are part of the unfunded actuarial liability. The following significant assumptions were used in the actuarial valuation as of June 30, 1999:

- a rate of return on investments of 8 percent compounded annually (adopted June 30, 1998);
- projected salary increases of 5 percent compounded annually, attributable to inflation (adopted June 30, 1988);
- additional projected salary increases ranging from 0.94 percent to 6.82 percent per year attributable to seniority and merit (adopted June 30, 1988);
- post-retirement benefit increases ranging from 3 percent to 6 percent per year depending on the system (adopted June 30, 1982);
- rates of mortality, termination of service, disablement and retirement based on actual experience during the period from 1981 through 1996 (adopted June 30, 1998); and
- the aggregate active member payroll is assumed to increase by 5 percent annually (adopted June 30, 1988).

# Other Supplementary Information

## Fund Balance Accounts

As provided by law, all System assets must be credited, according to the purpose for which they are held, to either the Annuity Savings Fund, the Accumulation Fund or the Expense Fund. These funds are classified as accounts for financial reporting purposes and are further explained as follows:

**a. Annuity Savings Fund:**

Members' contributions together with interest thereon, at statutory interest rates, are credited to the Annuity Savings Fund. Upon retirement, members' accumulated contributions and interest are transferred from the Annuity Savings Fund to the Accumulation Fund.

**b. Accumulation Fund:**

Contributions made by employers, other contributions and investment income are credited to the Accumulation Fund. All retirement, disability and death benefits are paid from this Fund.

**c. Expense Fund:**

All expenses for the administration and operation of the System are recorded in the Expense Fund. During the year, funds are transferred from the Accumulation Fund to the Expense Fund to cover expenses incurred.

# Schedule of Fund Balances

## for the Fiscal Year Ended June 30, 1999 (with Comparative 1998 Totals)

*(Expressed in Thousands)*

| | Annuity Savings Fund | Accumulation Fund | Expense Fund | Totals 1999 | Totals 1998 |
|---|---|---|---|---|---|
| **Fund balances, beginning of year** | $ 1,505,629 | $ 26,555,553 | $ — | $ 28,061,182 | $ 24,542,770 |
| **Additions:** | | | | | |
| Net investment income | — | 2,383,056 | (157,658) | 2,225,398 | 3,782,237 |
| Contributions (note 4) | | | | | |
| Employers | — | 252,337 | — | 252,337 | 262,404 |
| Members | 162,342 | — | — | 162,342 | 78,609 |
| Other | — | 441,016 | — | 441,016 | 473,384 |
| **Deductions:** | | | | | |
| Benefit payments | — | (1,115,086) | — | (1,115,086) | (1,047,774) |
| Refunds (note 5) | (12,634) | (4,264) | — | (16,898) | (20,007) |
| Administrative expenses (note 2f) | — | — | (24,742) | (24,742) | (10,441) |
| **Transfers:** | | | | | |
| From the Accumulation Fund to the Annuity Savings Fund for interest credited to members' accounts | 63,392 | (63,392) | — | — | — |
| To the Accumulation Fund from the Annuity Savings Fund for contributions of retiring members | (138,200) | 138,200 | — | — | — |
| From the Accumulation Fund to the Expense Fund for administrative and investment expenses | — | (182,400) | 182,400 | — | — |
| Net changes in fund balances | 74,900 | 1,849,467 | — | 1,924,367 | 3,518,412 |
| **Fund balances, end of year** | $ 1,580,529 | $ 28,405,020 | $ — | $ 29,985,549 | $ 28,061,182 |

# Schedule of Administrative Expenses
## for the Fiscal Years Ended June 30, 1999 and 1998

*(Expressed in Thousands)*

| | 1999 | 1998 |
|---|---|---|
| **Personnel services:** | | |
| Staff salaries | $ 6,197 | $ 5,305 |
| Fringe benefits | 1,697 | 1,418 |
| Total personnel services | 7,894 | 6,723 |
| **Professional and contractual services:** | | |
| Actuarial | 359 | 126 |
| Legal and financial | 185 | 202 |
| Data processing | 12,950 | 1,346 |
| Other contractual services | 372 | 366 |
| Total professional and contractual services | 13,866 | 2,040 |
| **Miscellaneous:** | | |
| Communications | 839 | 795 |
| Rent | 273 | 272 |
| Equipment and supplies | 217 | 290 |
| Legal settlement | 1,150 | — |
| Other | 503 | 321 |
| Total miscellaneous | 2,982 | 1,678 |
| **Total administrative expenses** | $ 24,742 | $ 10,441 |

# Investment Portfolios by Manager

## as of June 30, 1999

*(Expressed in Thousands)*

| | Fair Value | Investment Advisory Fees |
|---|---|---|
| **Equity Managers** | | |
| State Street Global Advisors | $ 5,306,566 | $ 500 |
| Internally Managed | 5,250,150 | N/A |
| Bank of Ireland Asset Management Limited | 1,825,174 | 3,679 |
| Brinson Partners, Inc. | 1,228,011 | 2,796 |
| Dimensional Fund Advisors Inc. | 901,664 | 886 |
| Templeton Investment Counsel, Inc. | 799,533 | 2,260 |
| The Capital Group, Inc.– Emerging Markets Growth Fund | 798,991 | 3,691 |
| Credit Suisse Asset Management | 786,497 | 2,299 |
| Scudder, Kemper Investments, Inc. | 517,879 | 2,140 |
| Wellington Trust Company, N.A. | 504,804 | 2,455 |
| Harbor International Fund | 467,448 | 3,253 |
| Legg Mason Capital Management, Inc. | 294,293 | 838 |
| Chapman Capital Management, Inc.– Minority Equity Trust | 216,082 | 1,456 |
| TCW Asset Management Company | 159,948 | 842 |
| Brown Capital Management, Inc. | 158,919 | 853 |
| Greenbelt Corp. | 147,623 | 1,174 |
| GEM Capital Management, Inc. | 140,691 | 422 |
| Brown Investment Advisory & Trust Co. | 122,482 | 488 |
| Advent Capital Management | 109,917 | 340 |
| Rothschild Asset Management, Inc. | 106,104 | 552 |
| Relational Investors, LLC | 96,207 | 62 |
| Thomson Horstmann & Bryant, Inc. | 85,464 | 587 |
| Nicholas-Applegate Capital Management | 70,153 | 372 |
| T. Rowe Price Associates, Inc. | 65,513 | 382 |
| Emerging Markets Investors Corporation | 6,044 | 92 |
| Maryland Venture Capital Trust | 5,865 | N/A |
| Harbour Vest Partners VI- Partnership Fund L.P. | 809 | 0 |
| Other * | 0 | 538 |
| | $ 20,172,831 | $ 32,957 |

| | Fair Value | Investment Advisory Fees |
|---|---|---|
| **Fixed Income Managers** | | |
| Internally Managed | $ 5,002,733 | N/A |
| Pacific Investment Management Company | 1,166,247 | 2,407 |
| Standish, Ayer & Wood, Inc. | 1,039,853 | 1,589 |
| Strategic Fixed Income, L.P. | 557,149 | 1,062 |
| Rothschild International Asset Management Limited | 377,219 | 513 |
| W.R. Huff Asset Management Co. | 251,761 | 1,249 |
| Progress Investment Management Company | 28,769 | 160 |
| Other * | 0 | 470 |
| | $ 8,423,731 | $ 7,450 |
| **Real Estate Managers** | | |
| ABKB/LaSalle Securities Limited | $ 447,502 | $ 1,009 |
| LaSalle Advisors Limited | 239,645 | 1,732 |
| J.P. Morgan Investment Management., Inc. | 143,211 | 1,152 |
| CIGNA Investment Management | 129,570 | 1,230 |
| Internally Managed Short-term Investments | 108,219 | N/A |
| Sentinel Real Estate Corporation | 58,167 | 682 |
| AEW Capital Management | 14,088 | 232 |
| | $ 1,140,402 | $ 6,037 |

* *Investment managers no longer under contract as of 6/30/99.*

# Investment Portfolio Summary

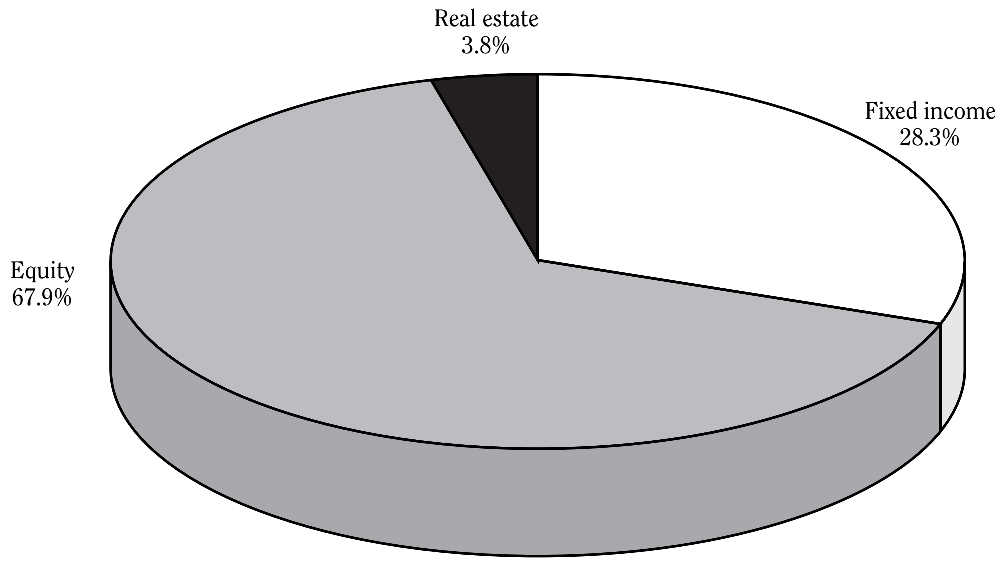
## as of June 30, 1999 and 1998

*(Expressed in Thousands)*

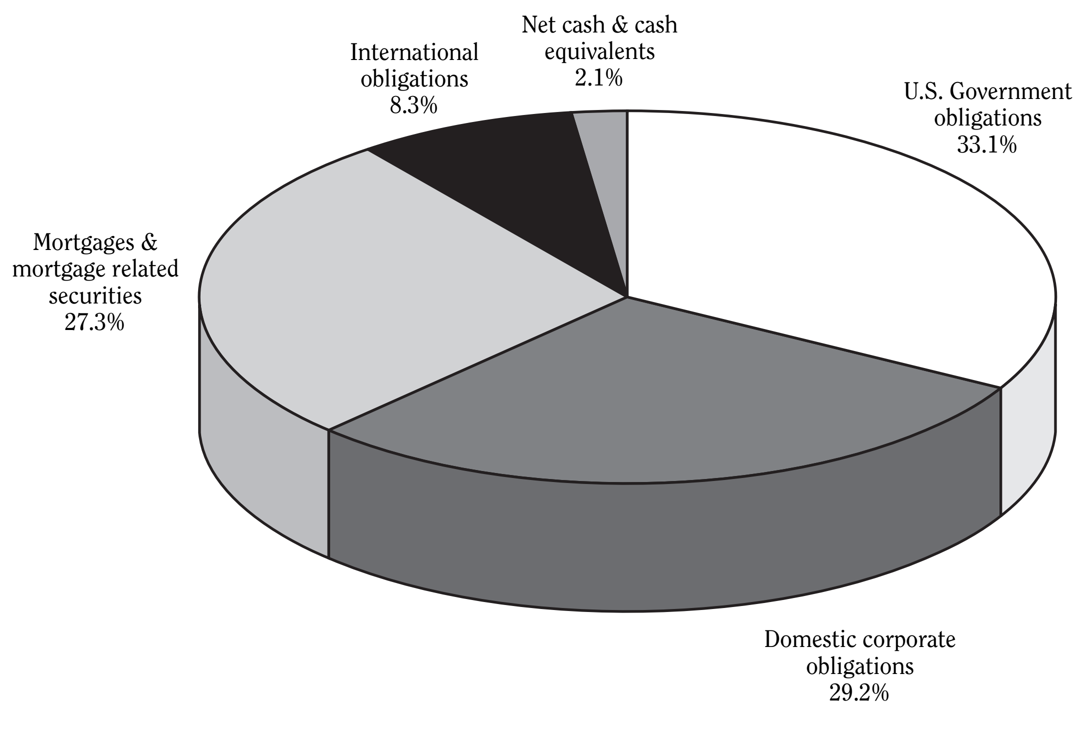
| | 1999 | | 1998 | |
|---|---|---|---|---|
| | Fair Value | % of Fair Value | Fair Value | % of Fair Value |
| **Fixed Income** | | | | |
| U.S. Government obligations | $ 2,788,318 | 9.3 % | $ 2,372,041 | 8.5 % |
| Domestic corporate obligations | 2,460,543 | 8.3 | 2,440,258 | 8.8 |
| Mortgages & mortgage related securities | 2,299,749 | 7.7 | 2,569,725 | 9.1 |
| International obligations | 700,289 | 2.4 | 650,827 | 2.3 |
| Net cash & cash equivalents | 174,832 | 0.6 | 733,365 | 2.6 |
| * Total Fixed Income | 8,423,731 | 28.3 | 8,766,216 | 31.3 |
| **Equity** | | | | |
| Domestic stocks | 13,800,260 | 46.4 | 12,220,591 | 43.7 |
| International stocks | 6,070,162 | 20.4 | 5,604,413 | 20.0 |
| Venture capital | 5,866 | 0.1 | 9,894 | 0.1 |
| Alternative investments | 809 | 0.0 | 0 | 0.0 |
| Net cash & cash equivalents | 295,734 | 1.0 | 387,603 | 1.4 |
| Total Equity | 20,172,831 | 67.9 | 18,222,501 | 65.2 |
| **Real Estate** | | | | |
| Real Estate Investment Trusts | 534,065 | 1.8 | 472,051 | 1.7 |
| Pooled funds | 345,037 | 1.2 | 312,374 | 1.1 |
| Directly owned real estate | 266,949 | 0.9 | 162,595 | 0.6 |
| Net cash & cash equivalents | (5,649) | (0.1) | 30,832 | 0.1 |
| Total Real Estate | 1,140,402 | 3.8 | 977,852 | 3.5 |
| Total Portfolio | $ 29,736,964 | 100.0 % | $ 27,966,569 | 100.0 % |

* *Security lending collateral payable has been netted against the actual collateral. The amounts net to zero.*

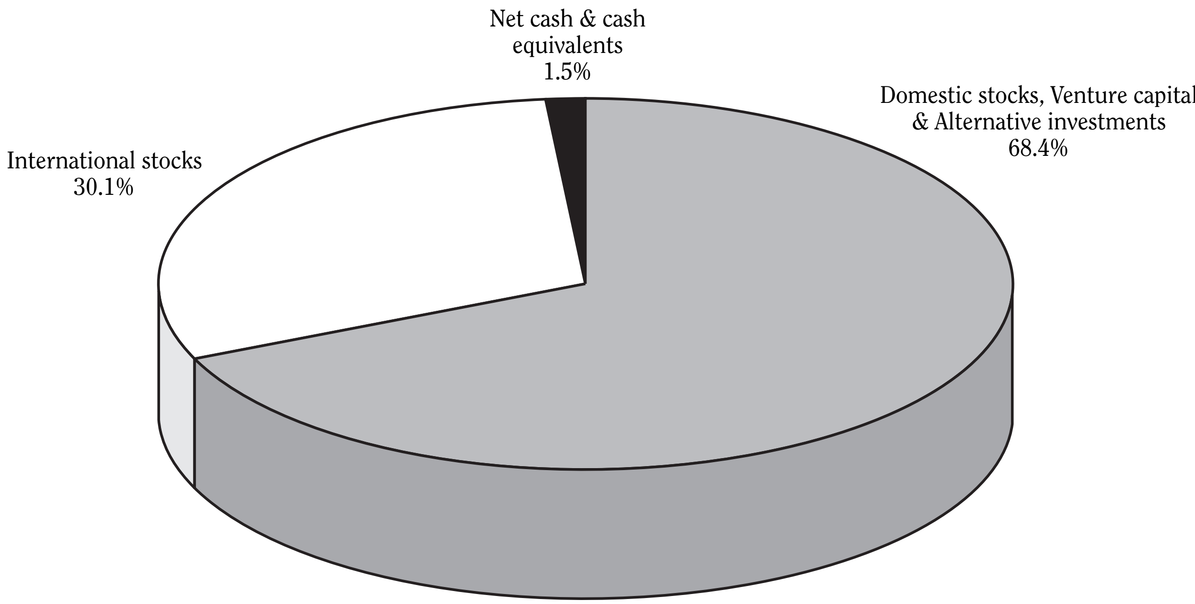
# Investment Portfolio Allocation
## as of June 30, 1999



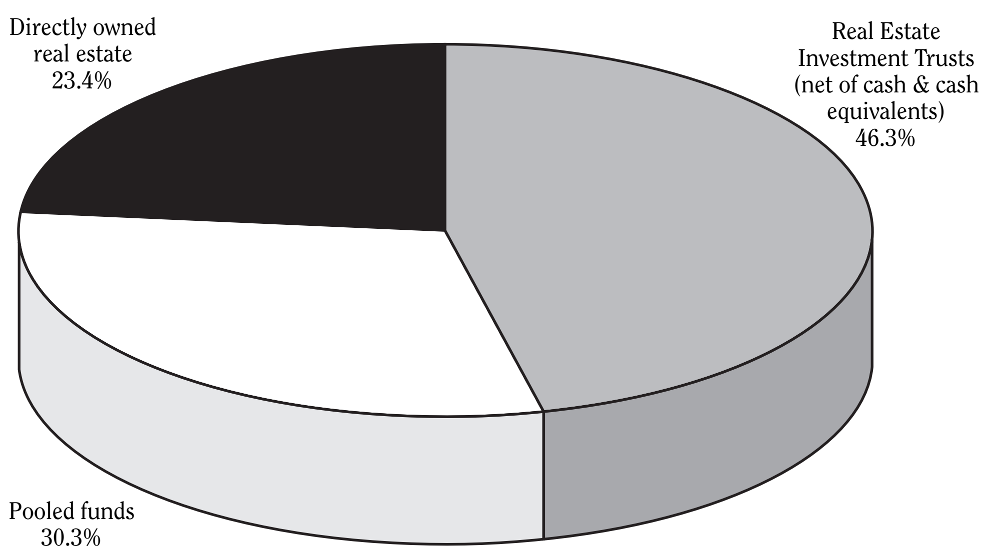

# Fixed Income Distribution by Type
## as of June 30, 1999



## Equity Distribution by Strategy
### as of June 30, 1999




## Real Estate Distribution by Strategy
### as of June 30, 1999



# Commissions to Brokers
## for the Fiscal Year Ended June 30, 1999
*(Expressed in Thousands)*

| Brokers * | Total Shares | Total Commission | Commission Per Share |
|---|---|---|---|
| Investment Technology Group, Inc. | 155,804 | $ 3,139 | $ 0.020 |
| Merrill Lynch, Pierce, Fenner & Smith, Inc. | 163,329 | 1,969 | 0.012 |
| Morgan Stanley & Co., Inc. | 100,296 | 1,877 | 0.019 |
| Goldman Sachs & Co. | 80,015 | 1,050 | 0.013 |
| HSBC James Capel | 30,864 | 896 | 0.029 |
| Kleinwort Benson Securities | 36,038 | 747 | 0.021 |
| Lehman Brothers Inc. | 19,677 | 613 | 0.031 |
| Salomon Smith Barney | 30,752 | 602 | 0.020 |
| Instinet Corp. | 38,912 | 568 | 0.015 |
| J.P. Morgan Securities, Inc. | 44,852 | 533 | 0.012 |
| Deutsche Morgan Grenfell | 14,849 | 467 | 0.031 |
| Warburg (S.G.) & Company, Inc. | 16,831 | 429 | 0.025 |
| Deutsche Bank | 15,239 | 381 | 0.025 |
| BT Alex Brown | 11,972 | 358 | 0.030 |
| Jefferies & Company, Inc. | 6,438 | 335 | 0.052 |
| Credit Suisse First Boston | 14,423 | 292 | 0.020 |
| Exane | 530 | 272 | 0.513 |
| SBC Warburg Dillon Read Inc. | 17,002 | 365 | 0.021 |
| ABN Amro Hoare Govett | 21,762 | 251 | 0.012 |
| Lewco Securities | 19,327 | 229 | 0.012 |
| Bear Stearns | 6,546 | 228 | 0.035 |
| Fox Pitt Kelton, Inc. | 2,982 | 211 | 0.071 |
| The Chapman Company | 3,700 | 176 | 0.048 |
| Enskilda Securities | 3,841 | 149 | 0.039 |
| Legg Mason | 3,188 | 148 | 0.046 |
| Paribas Capital Markets | 1,989 | 132 | 0.066 |
| Maxwell Yespinosa AI, S.A. | 1,086 | 119 | 0.110 |
| Schroder Securities Limited | 4,095 | 119 | 0.029 |
| Santander Investment Securities | 736,695 | 112 | 0.001 |
| ODDO Finance | 591 | 109 | 0.184 |
| Credit Lyonnais | 112,993 | 103 | 0.001 |
| Other broker fees | 192,852 | 2,789 | 0.014 |
| Total broker commissions | 1,909,470 | $ 19,768 | $ 0.010 |

** Proceeds from the sale and disbursements for the purchase of securities are reported net of brokers' commissions. As such, brokers' commissions are not included as investment expenses on the Combined Statements of Changes in Plan Net Assets. Other broker fees include 209 other brokers each receiving less than $100,000 in total commissions.*

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November 15, 1999

Board of Trustees
State Retirement and Pension System of Maryland
301 West Preston Street
Baltimore, MD 21201-2363

Dear Members of the Board:

At your request, we have performed our annual actuarial valuation of the State Retirement & Pension System of Maryland as of June 30, 1999. The results of the valuation are contained in this report.

**Funding Objective**

The funding objective of the System is to establish contribution rates which, over time, will remain level as a percent of payroll. In order to achieve this, a contribution rate has been determined which will provide for current cost (i.e., normal cost expressed as a level percent of payroll) plus a level percent of payroll amortization of the unfunded liability to the year 2020. This funding objective is currently being realized.

**Assumptions**

The actuarial assumptions used in this years' valuation have been recommended by the actuary and adopted by the Board of Trustees based upon the most recent review of the System's experience completed during Fiscal Year 1998. We believe the assumptions used, in the aggregate, represent our best estimate of future experience of the plan.

The assumptions and methods used in performing this valuation meet the parameters set for disclosure presented in the financial section of the System's Comprehensive Annual Financial Report (CAFR) by Government Accounting Standards Board Statement No.25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*.

**Reliance on Others**

In preparing our report, we have relied, without audit, on employee census data and financial information provided by the State Retirement Agency. Census data provided to us by the Agency has been reviewed for reasonableness, and for consistency with the data certified by the System's auditors.

**Supporting Schedules**

Certain information presented in the System's June 30, 1999 CAFR was derived from our June 30, 1999 actuarial valuation report. In this regard, we were responsible for producing all supporting schedules to be found in the Actuarial Section.

Additionally, we were responsible for producing all data presented in the Schedule of Funding Progress, Schedule of Employer Contributions and Notes to the Required Supplementary Information shown in the Financial Section of the 1999 CAFR.

**Certification**

On the basis of the foregoing, we certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with Maryland's Annotated Code and generally recognized and accepted actuarial principles and practices which are consistent with the applicable Guides to Professional Conduct, Amplifying Opinions, and supporting Recommendations and Interpretations of the American Academy of Actuaries.

Respectfully submitted,
MILLIMAN & ROBERTSON, INC.

E M Kalwarski

Eugene M. Kalwarski, F.S.A.
Principal

# BOARD SUMMARY

## Valuation Comments

This report presents the results of the June 30, 1999 actuarial valuation of the State Retirement and Pension System of Maryland (SRPS). The primary purposes for performing the valuation are as follows:

- to determine the contributions to be paid by the State in Fiscal Year 2001
- to disclose asset and liability measures as of June 30, 1999
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

The experience of the SRPS during the fiscal year ending June 30, 1999 was better than expected, both with respect to investments and liabilities. As a result, the State's cost, expressed as a percentage of payroll, decreased by 139 basis points (1.39%) compared to the prior fiscal year's cost. As the millennium approaches, the System's financial position is at an all time high. Unfunded liabilities are nearly extinguished, the System's funding ratio is at 97% and the State's contribution rate is lower than it has been for over 20 years. This rate excludes the $10.3 million to be paid by the University of Maryland to fund early retirement window benefits.

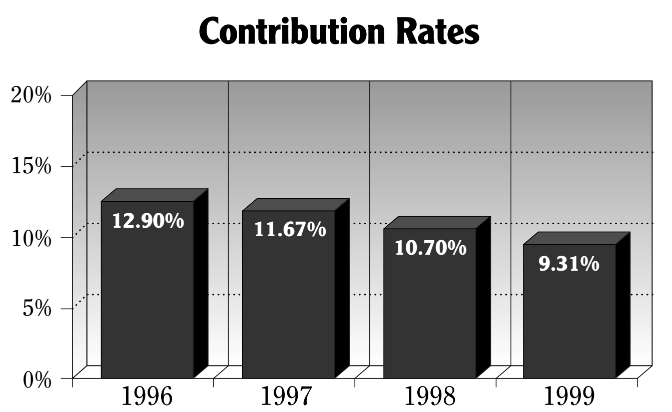
Looking at each of the components, System assets increased by $1,171 million more than expected and the liability growth was $584 million less than expected. Offsetting the actuarial gain on liabilities were plan improvements which increased the total liability by $64 million. The net effect of assets gains, liability gains, and plan changes is a net actuarial gain of $1,691 million.

Looking forward, the key to maintaining the System's financial condition will be investment performance.

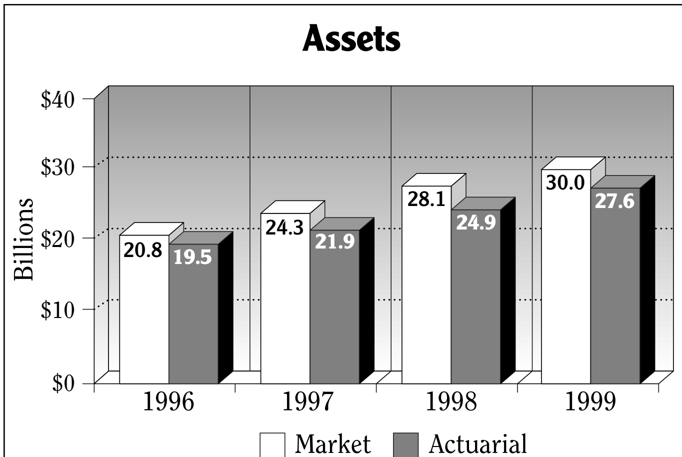
The balance of this section presents summarized information regarding System trends, details on the 1998/99 experience, and summary tables presenting results for each of the separate Systems.

## System Trends

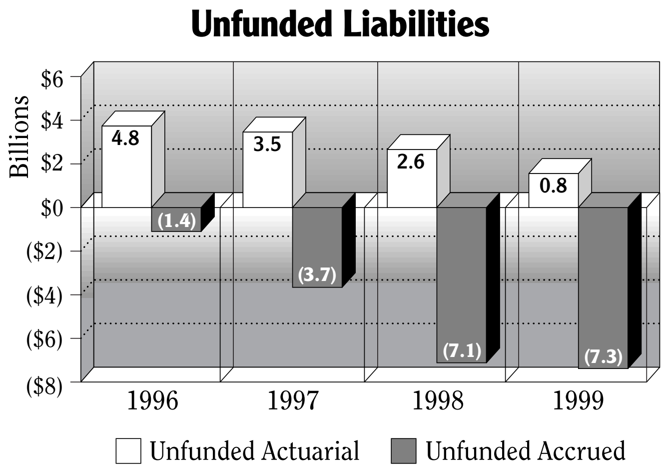
The major findings of the 1999 valuation are summarized and compared in the following charts:



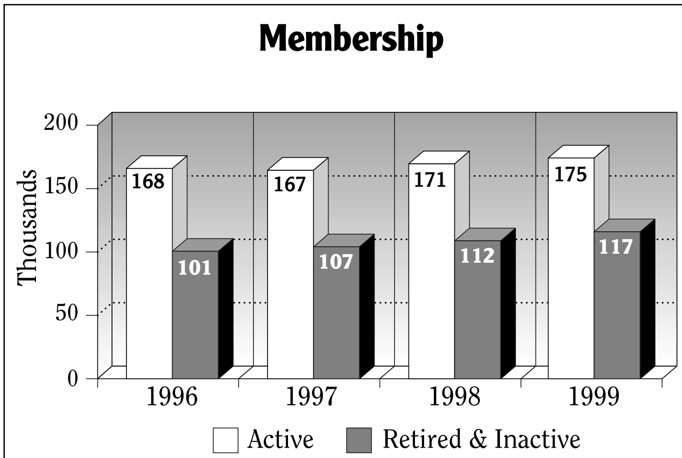

*The System's contribution rates have been declining over the past several years, primarily due to outstanding investment performance.*




*System asset growth on both a market value basis and an actuarial (smoothed) basis has been quite strong, with nearly a 50% increase over this short period.*




*Unfunded "actuarial liabilities" (projected) are significantly lower than expected for 1999. Again, investment performance is the primary reason. Unfunded "accrued liabilities," which measure the funded status of the System based on participants' current service credits and salaries (i.e., no projections), have been negative since 1996.*




*Active membership has grown about 1% per year for the period shown. Inactive membership (retirees and vested terminations) has grown 4% per year over the four-year period. As this trend increases, System cashflows (contributions less payouts) will increasingly become negative, leading to important investment considerations.*

# Experience 1998–1999

Below we examine the specific factors which contributed to the change in the System's assets, liabilities, and contribution rates between June 30, 1998 and June 30, 1999.

## Assets

Between June 30, 1998 and June 30, 1999, assets of the System (measured on an actuarial smoothed basis) increased by $2,796 million. This change is analyzed below:

| (In Millions) | | Actuarial Value |
|---|---|---|
| June 30, 1998 actuarial value of assets | | $24,850 |
| Changes in Assets | | |
| • Employer and Member Contributions | $ 855 | |
| • Benefits and Expenses | (1,204) | |
| • Expected Investment Return | 1,974 | |
| • Investment Gain/(Loss) | 1,171 | |
| Total Changes | $2,796 | |
| June 30, 1999 actuarial value of assets | | $27,646 |

The expected investment return shown above is based on a 8.0% assumption. The actual return was 12.74%. The actuarial value of assets is based on a smoothing method to dampen fluctuations caused by market forces. Each year the actuarial value of assets will recognize only one-third of the return greater or less than the 8.0% assumption. The $1,171 million investment gain reflects the amount being recognized by this year's actuarial value.

## Liabilities

Two different measurements of liabilities are calculated at each valuation.

- **Actuarial Liabilities** are used for determining contribution levels and include projections of future service and payroll. These liabilities are also suitable for disclosure under Government Accounting Standards Board Statements Number 25 & 27.
- **Liability for Accrued Benefits** is used for informational purposes and is based on service and payroll as of June 30, 1999.

Between June 30, 1998 and June 30, 1999 these liabilities changed as follows:

| (In Millions) | June 30, | | |
|---|---|---|---|
| | **1999** | **1998** | **Change** |
| Actuarial Liability | $28,475 | $27,417 | $1,058 |
| Liability for Accrued Benefits | $22,690 | $20,982 | $1,708 |

The growth in actuarial liabilities, $1,058 million, reflects a $584 million gain, and an increase of $64 million due to benefit improvements. This gain was attributable to a number of factors, including cost of living adjustments and payroll growth less than assumed during the prior year.

## Unfunded Liabilities

The net changes in System unfunded liabilities between June 30, 1998 and June 30, 1999 are summarized below:

| (In Millions) | June 30, 1999 | June 30, 1998 | Change |
|---|---|---|---|
| Actuarial Liability | $28,475 | $27,417 | $ 1,058 |
| Less the Actuarial Value of Assets | 27,646 | 24,850 | 2,796 |
| Unfunded Actuarial Liability | $ 829 | $ 2,567 | $ (1,738) |

Between June 30, 1998 and June 30, 1999, unfunded actuarial liabilities were expected to increase to $2,583 million, or an increase of $17 million. The difference between the actual decrease of $1,738 million and the expected increase represents a $1,755 million net actuarial gain. The components of this gain are summarized as follows:

| | |
|---|---|
| Liability gain/(loss) | $ 584 |
| Investment gain/(loss) | 1,171 |
| Net Actuarial gain/(loss) | $ 1,755 |

If future experience is exactly as assumed, these unfunded liabilities are expected to increase until the year 2003. This is because the actuarial liabilities are being amortized by future payments which are level as a percent of payroll (i.e., low dollars in early years, increasing by 5% per year thereafter).

## Contributions

The State's contribution rate decreased by 1.39% of pay, to 9.31% as of June 30, 1999 from 10.70% on June 30, 1998. This change can be analyzed as follows:

| | |
|---|---|
| **June 30, 1998 State rate** | 10.70% |
| Increases | |
| • Plan Changes | 0.15 |
| Decreases | |
| • Investment gain | (1.06) |
| • Liability gain | (0.48) |
| **June 30, 1999 State rate** | 9.31% |

## Membership

The total membership (both active and inactive) of the System increased to 291,817 as of June 30, 1999 from 282,478 as of June 30, 1998, an increase of 3.3%. The total annual payroll of active members increased by 3.9% to $6.39 billion as of June 30, 1999 from $6.15 billion as of June 30, 1998.

# Actuarial Procedures and Assumptions

## Asset Valuation Method

The market value representing the value for which assets could be sold on a particular day, is not necessarily an appropriate value for the purpose of setting the contribution rates for the System. This is because funding will take place over a long period into the future during which time market values can be expected to fluctuate widely. If market values were used to develop contribution rates, the resulting contributions would also vary widely.

In order to produce a stable pattern of contribution rates, market values are adjusted so that some of the volatility is removed. This adjusted value of assets is called actuarial value. For purposes of this valuation, actuarial value is determined by using a simplified three-year moving average. Under this method (adopted July 1, 1992), the actuarial value of the assets is one-third of the market value plus two-thirds of the expected value, where the expected value is last year's actuarial value and subsequent cash flows into and out of the fund accumulated with interest at the actuarial assumed rate of return on investments.

For the Employees' Retirement and Pension System, total assets must be allocated between State and the Participating Governmental Unit pool. Beginning July 1, 1984, this allocation is based upon actual aggregate cash flows and shared investment results.

## Funding Method

The System uses the aggregate entry age normal method with projection to determine costs. Under this funding method (adopted July 1, 1984), a total contribution rate is determined which consists of two elements, the normal cost rate and the unfunded actuarial liability rate (UAL).

For the Teachers' Pension, Employees' Pension, State Police, Judges', Law Enforcement Officers' Pension, and Local Fire and Police Systems an individual entry age normal cost rate is determined for a typical new entrant of each respective system. This rate is determined by taking the value, as of age at entry into the plan, of the member's projected future benefits, and dividing it by the value, also as of the member's entry age, of their expected future salary.

For members of the Teachers' and Employees' Retirement Systems, the new entrant normal cost rate is set at the same rate developed for the Teachers' and Employees' Pension Systems, respectively.

In addition to contributions required to meet the System's normal cost, contributions will be required to fund the System's unfunded actuarial liability. Actuarial liability is defined as the present value of future benefits less the present value of future normal costs. The unfunded actuarial liability is the total of the actuarial liability for all members less the actuarial value of the System's assets.

If the System's unfunded actuarial liability is increased by actuarial losses or decreased by actuarial gains, these amounts will be included as part of the unfunded actuarial liability and funded over the remaining amortization period.

## Retirement Benefits

Effective July 1, 1980, in accordance with the law governing the System, all benefits of the System are funded in advance. Employer contribution rates for retirement benefits are determined using the entry age normal cost method. This method produces an employer contribution rate consisting of (1) an amount for normal cost (the estimated amount necessary to finance benefits earned by employees during the current service year), and (2) the amount for amortization of the unfunded actuarial accrued liability. The unfunded actuarial accrued liability is being amortized over 40 years (as provided by law) and the liquidation period for the unfunded actuarial accrued liabilities is 21 years from June 30, 1999.

## Actuarial Assumptions

The assumptions used for the actuarial valuation were recommended by the System's independent actuary, based upon periodic analysis of the System's experience, and adopted by the Board of Trustees. Differences between assumed and actual experience (i.e., actuarial gains and losses) are part of the unfunded actuarial liability. The following significant assumptions were used in the actuarial valuation as of June 30, 1999:

- a rate of return on investments of 8 percent compounded annually (adopted June 30, 1998);
- projected salary increases of 5 percent compounded annually, attributable to inflation (adopted June 30, 1988);
- additional projected salary increases ranging from 0.94 percent to 6.82 percent per year attributable to seniority and merit (adopted June 30, 1988);
- post retirement benefit increases ranging from 3 percent to 6 percent per year depending on the system (adopted June 30, 1982);
- rates of mortality, termination of service, disablement, and retirement based on actual experience during the period from 1981 through 1996 (adopted June 30, 1998); and
- the aggregate active member payroll is assumed to increase by 5 percent annually (adopted June 30, 1988).

# Report of the Actuary on the Valuation of the State Retirement and Pension System of Maryland
## as of June 30, 1999

### *Summary of Principal Results*

| | June 30, 1999 | June 30, 1998 | % Change |
|---|---|---|---|
| **1. Participant Data** | | | |
| Number of: | | | |
| Active Members | **174,674** | 170,663 | 2.35 % |
| Retired Members and Beneficiaries | **77,478** | 74,339 | 4.22 |
| Vested Deferred Members | **25,649** | 25,946 | (1.14) |
| Inactive Status Members* | **14,016** | 11,530 | 21.56 |
| Total Participants | **291,817** | 282,478 | 3.31 |
| Annual Salaries of Active Members | **$ 6,388,973,031** | $ 6,148,300,166 | 3.91 |
| Annual Retirement Allowances for Retired Members and Beneficiaries | **$ 1,127,848,058** | $ 1,047,317,905 | 7.69 |
| **2. Assets and Liabilities** | | | |
| Total Actuarial Liability | **$ 28,475,380,046** | $ 27,416,934,921 | 3.86 |
| Assets for Valuation Purposes | **27,646,578,997** | 24,850,355,227 | 11.25 |
| Unfunded Actuarial Liability | **828,801,049** | 2,566,579,694 | (67.71) |
| FASB Accrued Liability | **22,689,785,519** | 20,982,496,145 | 8.14 |
| Market Value of Assets | **29,985,548,981** | 28,061,182,962 | 6.86 |
| Unfunded FASB Accrued Liability (Surplus) | **(7,295,763,462)** | (7,078,686,817) | (3.07) |

** Inactive status refers to vested members who are not on active payroll status, have not withdrawn their accumulated contributions from the System, and have past membership service credit which may be counted towards future benefits.*