

MARYLAND STATE RETIREMENT and PENSION SYSTEM

Annual Comprehensive Financial Report

Maryland State Retirement and Pension System A Component Unit of the State of Maryland For the Years Ended June 30, 2024 and 2023

2024

MISSION STATEMENT

The Board of Trustees of the Maryland State Retirement and Pension System (System) is charged with the fiduciary responsibility for administering the survivor, disability and retirement benefits of the System's participants and to ensure that sufficient assets are available to fund the benefits when due. To accomplish this mission the System has established the following key goals:

- To prudently invest System assets in a well diversified manner to optimize long-term returns, while controlling risk though excellence in execution of the investment objectives and strategies of the System.
- To effectively communicate with all retirement plan participants to inform them about the benefits provided by the System, and to educate them about planning and preparing for all aspects of their future retirement.
- To accurately and timely pay retirement allowances provided by State pension law to the System's retirees and their beneficiaries.
- To implement an automated, comprehensive and integrated pension administration and electronic document management system.
- To efficiently collect the required employer and member contributions necessary to fund the System.

Annual Comprehensive Financial Report Maryland State Retirement and Pension System



A Component Unit of the State of Maryland

For the Fiscal Years Ended June 30, 2024 and 2023

Prepared by: Maryland State Retirement Agency 120 East Baltimore Street Baltimore, Maryland 21202

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December 23, 2024

Dear Members, Retirees and Beneficiaries:

STATE RETIREMENT AGENCY

120 East Baltimore Street

Baltimore, MD 21202-6700

On behalf of the Board of Trustees, we are pleased to present the Annual Comprehensive Financial Report of the Maryland State Retirement and Pension System for the fiscal year that ended June 30, 2024. This report provides information on the financial status of the System during a period when it issued approximately \$410 million in average monthly payments to more than 175,000 retirees and beneficiaries.

The System generated a return of 6.93%, net of fees, for the fiscal year ending June 30, 2024, beating its policy benchmark of 6.34% as well as the actuarial assumed rate of 6.80%. The fund's performance raised the System's assets to \$68.2 billion, an increase of \$3 billion over the prior fiscal year.

The fiscal year 2024 returns were driven by the strong performance of public equities, particularly U.S. stocks as the domestic economy and consumer remain resilient against a backdrop of higher interest rates and elevated inflation. While stocks performed well in the fiscal year, bonds and real estate continued to struggle. Because asset classes perform differently under various economic environments, the Board has adopted a diversified mix of investments that is designed to achieve the actuarial assumed rate of return over time with an acceptable level of risk.

While the focus will typically be on investment returns, the Board recognizes that the management of risk is equally important in the investment of plan assets. History has shown that returns will vary from year to year, at times by wide margins. The Board has adopted investment policies designed to minimize the downside impact of such volatility on the value of System assets, while still capturing significant value when markets are strong.

Your Retirement System remains administratively and financially sound. As a participant in the System, you can remain confident that your pension benefits are secure. As always, your commitment to and involvement in the concerns of the System are greatly appreciated. We value your input—this is your System. If you have any questions, please do not hesitate to contact us.

Sincerely,

Dorech E. Davis

DERECK E. DAVIS Chair

Brooke Lierman Vice-Chair

Dereck E. Davis, *Chair* Jamaal R. A. Craddock James P. Daly, Jr. Ayana K. English-Brown

Helene Grady Sheila Hill Charles Hopkins Richard E Norman Mia N. Pittman Douglas Prouty Brooke Lierman, *Viæ-Chair* Michelle RhodesBrown Tarrus Richardson Robert F. Sandlass, Jr.

Martin Noven, Secretary to the Board

BOARD OF TRUSTEES

Maryland State Retirement and Pension System



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LETTER OF TRANSMITTAL

December 15, 2024

We are pleased to submit the Annual Comprehensive Financial Report for the Maryland State Retirement and Pension System for the fiscal year ended June 30, 2024. We believe this report fairly presents the operating results achieved during this 12-month reporting period.

The System is responsible for properly administering retirement, disability, and death benefits. At the same time, it strives to keep employer contribution rates as reasonable as possible by maximizing investment returns while maintaining an acceptable level of risk. Members covered by the plans include state employees, teachers, law enforcement officers, legislators, judges, as well as local government employees and correctional personnel whose employers have elected to participate in the System.

The System currently provides monthly allowances to more than 175,000 retirees and beneficiaries and is an essential element of the future financial security for more than 205,000 active participating members. Descriptions of the membership requirements and benefits provided by each plan administered by the System are included in the Plan Summary Section starting on page 157.

This Annual Comprehensive Financial Report contains six sections. The Introductory Section provides information about the administrative structure of the System. The Financial Section provides a comprehensive review of the System's financial position, the results of its operations and its funded status. It also contains the report from the System's independent auditor, the combined financial statements, and supplementary financial data. The Investment Section includes a report highlighting the System's investment performance in addition to various summary level portfolio compositions and other investment data. The Actuarial Section contains the independent actuary's report on the results of the System's annual actuarial valuation. The Statistical and Plan Summary Sections provide demographic composition of the System's membership segments affected by each plan and detailed descriptions of the various plans' provisions. In addition to this Letter of Transmittal, additional narrative, overview, and analysis can be found in Management's Discussion and Analysis beginning on page 19.

INVESTMENTS

The System's investment portfolio generated a return of 6.93% net of fees, for the fiscal year ending June 30, 2024, beating its policy benchmark of 6.34%. After the payment of benefits, the market value of assets increased by more than \$3.0 billion from \$64.9 billion on June 30, 2023, to \$67.9 billion on June 30, 2024.

The System's long-term target strategic asset allocation is comprised of 34 percent public equities, 20 percent rate sensitive assets, 16 percent private equities, 9 percent credit/debt strategies, 15 percent real assets, and 6 percent absolute return. The System's portfolio is balanced across several asset and sub-asset classes and is globally diversified. This, coupled with a long-term investment horizon, provides the System with greater protection during short-term market volatility.

FINANCIAL REPORT CONTENT AND STRUCTURE

System management has committed the resources necessary to maintain an internal control structure that provides reasonable assurance that assets are adequately safeguarded, financial records are consistently and accurately maintained, and transactions are properly executed to permit preparation of financial statements in accordance with generally

STATE RETIREMENT AGENCY 120 East Baltimore Street Baltimore, MD 21202-6700 accepted accounting principles. The System's internal control structure includes written policies and procedures and an internal audit division that reports to the Board.

ACCOUNTING SYSTEM AND REPORTS

The System reports its transactions on the accrual basis of accounting. Under this method, revenues are reported in the accounting period they are earned and become measurable, and expenses are reported when the related liability is incurred and measurable. 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 2024, investment earnings were \$5.1 billion, while revenues from employer and member contributions were \$2.6 billion and \$1.1 billion, respectively. For fiscal year 2024, member contribution rates on average were seven percent, while employer rates varied depending on the System.

EXPENSES

The System's expenses consist of monthly retirement allowances, refunds of contributions to terminated and transferring members, withdrawing employers, and the administrative cost of System operations. Payments to retirees, beneficiaries and transferring or withdrawing members and employers continued to be the System's primary disbursements during FY 2024, totaling \$5.0 billion. In addition, the System disbursed \$774 million to manage the investment portfolio and to administer the System, of which \$723 million was paid for investment management, portfolio custody, and securities lending services and \$51 million was used to fund the System's administrative operations.

FUNDING

Funds are derived from the excess of additions, which include contributions and investment earnings, over deductions, which are comprised of benefits and administrative expenses. Funds are accumulated to meet future benefit obligations to retirees and beneficiaries. This accumulated balance is referred to as the "fiduciary net position restricted for pensions" in the Statements of Fiduciary Net Position in the Financial Section of this report. The actuarial accrued liability is not disclosed in the basic financial statement but is disclosed in the Schedule of Funding Progress in Other Supplementary Information section to the financial statements along with the actuarial value of assets, which is based on a five-year smoothed expected rate of return, wherein the excess or shortfall of investment income over or under the actuarial assumed income of 6.80 percent is recognized over a five-year period. This is the value of assets used by the actuary in determining contribution rates for the Systems as disclosed in note five to the basic financial statements.

The actuarial accrued liability of the Systems is also determined by the actuary. It is a measure of the present value of actuarial accrued liabilities estimated to be payable in the future to current retirees, beneficiaries and employees for service earned to date. The percentage computed by dividing the actuarial value of net assets available for benefits by the actuarial accrued liability is generally referred to as the "funded ratio." This ratio provides an indication of the funded status of the System on a going-concern basis and generally, the greater this percentage, the stronger the System. The System's funded ratio decreased from 75.3 percent on June 30, 2023, to 73.4 percent on June 30, 2024 (74.2 percent before assumption changes).

On June 30, 2024, the System's actuarial accrued assets and liability were \$70.3 billion and \$95.8 billion, respectively. The unfunded actuarial accrued liability totaled \$25.5 billion, resulting in the aforementioned funded ratio of 73.4 percent. The unfunded actuarial accrued liability is being amortized over various closed periods, with a weighted-average amortization period of approximately 15 years as of June 30, 2024.

PROFESSIONAL SERVICES

The System contracts for the services of various independent consulting, investment advisory and financial professionals to assist the Board of Trustees in carrying out its fiduciary responsibility to manage the System efficiently and effectively. Actuarial services were provided by Gabriel Roeder Smith & Company and independent financial statement audit services were provided by CliftonLarsenAllen LLP. The System's asset custody and portfolio accounting services were provided by the State Street Bank & Trust Company under a multi-year, master custody arrangement. Meketa Investment Group, Inc. served as the System's general investment consultant. Specialty consulting services were provided by Hamilton Lane for private equity and Townsend Holdings, LLC for real estate. Aksia, LLC advises staff on the retirement System's Absolute Return portfolio. A complete listing of the System's professional consultants and external investment advisors is presented on page 11.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Maryland State Retirement and Pension System for its Annual Comprehensive Financial Report for the fiscal year ended June 30, 2023. This was the thirty fifth consecutive year (1989 through 2023) that it has received this prestigious award. To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized annual comprehensive 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 annual comprehensive 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 the next annual certificate issuance.

The Public Pension Coordinating Council (PPCC) named the Maryland State Retirement and Pension System as winner of both Public Pension Standards Awards for Funding and Administration. The standards serve as a benchmark to measure the management, administration and funding of public defined benefit plans.

The Public Pension Coordinating Council is a coalition of three national associations that represent public retirement systems and administrators: the National Association of State Retirement Administrators (NASRA), the National Council on Teacher Retirement (NCTR) and the National Conference on Public Employee Retirement Systems (NCPERS). Together, these associations represent more than 500 of the largest pension plans in the United States, serving most of the nation's 18+ million state and local government employees. The Public Pension Standards are intended to reflect expectations for public retirement Systems management and administration and serve as a benchmark by which all defined benefit public plans should be measured. The Maryland State Retirement and Pension System is proud to be a recipient of this award.

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, the System's staff, the Board's advisors, and the many people who worked with diligence and dedication throughout fiscal year 2023. Special thanks go to the members of the Maryland State Retirement Agency's senior executive team and the agency's staff of professional and paraprofessionals who helped to gather and prepare the information for this report.

Martin Noven Executive Director Secretary to the Board

BOARD OF TRUSTEES AS OF NOVEMBER 2024



Dereck E. Davis, *Chair* State Treasurer Ex Officio since December 17, 2021 Member, Administrative Committee Member, Investment Committee



Brooke Lierman, *Vice Chair* State Comptroller Ex Officio since January 16, 2023 Chair, Investment Committee Member, Corporate Governance and Securities Litigation Committee



Jamaal R. A. Craddock August 1, 2021 - July 31, 2025 Member, Administrative Committee Member, Audit Committee



Helene Grady Ex Officio since January 18, 2023 Member, Administrative Committee Member, Corporate Governance and Securities Litigation Committee Member, Investment Committee



James P. Daly, Jr. July 1, 2021 – June 30, 2025 Vice Chair, Investment Committee Member, Corporate Governance and Securities Litigation Committee



Sheila Hill August 1, 2023 – July 31, 2027 Vice Chair, Corporate Governance and Securities Litigation Committee Member, Investment Committee



Ayana K. English-Brown August 1, 2023 – July 31, 2027 Member, Administrative Committee



Charles Hopkins August 1, 2024 – July 31, 2028 Member, Corporate Governance and Securities Litigation Committee



Richard E. Norman August 1, 2022 – July 31, 2026 Chair, Administrative Committee Member, Audit Committee Member, Investment Committee

BOARD OF TRUSTEES



Mia Pittman August 1, 2023 – July 31, 2027 Chair, Audit Committee



Douglas Prouty August 1, 2021 – July 31, 2025 Chair, Corporate Governance and Securities Litigation Committee Member, Investment Committee



Michelle RhodesBrown August 1, 2023 – July 31, 2027 Member, Corporate Governance and Securities Litigation Committee Member, Investment Committee



Tarrus Richardson July 1, 2023 – June 30, 2027 Member, Investment Committee

ADVISORS TO THE INVESTMENT COMMITTEE



Robert F. Sandlass, Jr. July 1, 2021 - June 30, 2025 Vice-Chair, Audit Committee Vice-Chair, Administrative Committee Member, Corporate Governance and Securities Litigation Committee



Michael K. Barry July 1, 2022 – June 30, 2025



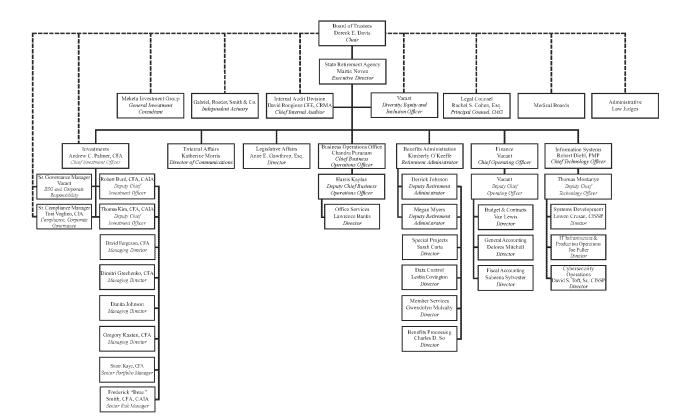
Sharcus Steen July 1, 2023 – June 30, 2026



Monte Tarbox July 1, 2018 – June 30, 2024

ORGANIZATIONAL CHART

(November 2024)



* Additional information regarding investment professionals who provide services to the System can be found on pages 11, and 103-108. The Schedule of Equity Commissions to Brokers can be found on page 109.

PROFESSIONAL SERVICES

Global Custodial Bank and Security Lending

State Street Bank & Trust Company Boston, Massachusetts

> Deutsche Bank New York, New York

Hearing Officers

Office of Administrative Hearings Baltimore, Maryland

Independent Actuary

Gabriel Roeder Smith & Co. Southfield, Michigan

Independent Public Accountant

CliftonLarsonAllen, LLP Timonium, Maryland

Independent Investment Consultants

Hamilton Lane Advisors, LLC Conshohocken, Pennsylvania

Meketa Investment Group, Inc. Westwood, Massachusetts

Townsend Holdings, LLC Cleveland, Ohio

Aksia, LLC New York, New York

Operational Banking Services

M & T Bank Baltimore, Maryland

The Harbor Bank of Maryland Baltimore, Maryland



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Maryland State Retirement and Pension System

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2023

Christophen P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2024

Presented to

Maryland State Retirement and Pension System

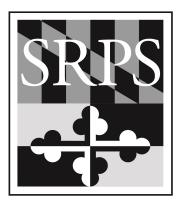
In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

alan Helinele

Alan H. Winkle Program Administrator



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INDEPENDENT AUDITORS' REPORT

Board of Trustees Maryland State Retirement and Pension System Baltimore, Maryland

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the Maryland State Retirement and Pension System (the System), a component unit of the State of Maryland, as of and for the years ended June 30, 2024 and 2023, and the related notes to the financial statements, which collectively comprise the System's basic financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System, as of June 30, 2024 and 2023, and the changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

CLA (CliftonLarsonAllen LLP) is an independent network member of CLA Global. See CLAglobal.com/disclaimer.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis, the schedules of changes in the employers' net pension liability, employers' net pension liability and related ratios, employers' contributions and investment returns be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the System's financial statements. The schedules of funding progress, fund balances, administrative expenses, investment expenses, fiduciary net position by system, and changes in fiduciary net position by system (other supplementary information) are presented for purposes of additional analysis and are not required parts of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, plan summary, actuarial and statistical sections but does not include the basic financial statements and our auditors' report thereon. Our opinion on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 22, 2024, 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 solely 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 effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Clifton Larson Allen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland November 22, 2024

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEARS ENDED JUNE 30, 2024 AND 2023

To help facilitate a better understanding of the Maryland State Retirement and Pension System's (the System) financial condition as of June 30, 2024 and 2023, the results of its operations for the fiscal years then ended, and the fiscal policies that govern its significant business operations, management has prepared this narrative analysis. This narrative is intended to supplement the System's audited financial statements and, as such should be read in conjunction with these statements, which are presented beginning on page 25.

OVERVIEW OF THE FINANCIAL STATEMENTS

As required by accounting principles generally accepted in the United States of America, the System's basic financial statements are comprised of the comparative Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position, along with the related note disclosures. In addition, the System's financial statements include certain required supplementary information (e.g., schedule of changes in employers' net pension liability, schedule of employers' net pension liability and related ratios, schedule of employers' contributions, and schedule of investment returns) as well as other supplementary schedules considered relevant to the financial statement user (e.g., schedules of fund balance accounts, administrative and investment expenses, fiduciary net position by system, and related changes by system). To better understand the relevance of the information presented in the System's financial statements, related notes, and supplementary information, it is helpful to first consider what purpose each component is intended to serve.

The Statements of Fiduciary Net Position presents a comparative, summary-level snapshot, as of a specific point in time (i.e., June 30th – the last day of the System's fiscal year), of the fair value of the net position available to pay future pension benefits to retirees and beneficiaries. To assist the reader in understanding the composition of the System's accumulated net position the most significant components (e.g., cash and cash equivalent securities, investments) are separately disclosed. In this regard, cash and cash equivalents represent that portion of the System's assets that, as of the end of the fiscal year, reside in the form of actual cash or short-term, highly liquid, investment securities. This amount gives an indication of the System's liquidity at fiscal year-end. Conversely, the amounts shown as investments represent those funds invested in longer-term securities (e.g., stocks, bonds, real estate) held for the purpose of generating investment income. The sum of these assets, reduced by any liabilities owed by the System as of fiscal year-end, represents the net position held in trust to pay pension benefits.

By contrast, the Statements of Changes in Fiduciary Net Position are intended to show, on a comparative basis, the major categories of income earned (additions to fiduciary Net position) and expenses incurred (deductions from fiduciary Net position) by the System during the previous fiscal year. As such, the System's net income or loss accounts for the entire change in the net position held in trust to pay pension benefits during the fiscal year as a result of System operations. As with the System's assets and liabilities, significant categories of income and expense, as reported on the Statements of Changes in Fiduciary Net Position, are separately disclosed to help clarify the major sources and uses of the System's resources.

Finally, the note disclosures are provided as an integral component of the basic financial statements to help explain in narrative form some of the more complex or less obvious elements of the statements. Further, the notes to the financial statements provide additional information (e.g., significant accounting policies, various types of investment risk) that is essential for a comprehensive understanding of the System's financial condition and the results of its operations.

The Schedule of Changes in Employers' Net Pension Liability, Schedule of Employers' Net Pension Liability and Related Ratios, Schedule of Employers' Contributions, and Schedule of Investment Returns share common characteristics with data disclosed in the basic financial statements. In this regard, both the Statements of Changes in Fiduciary Net Position and the Schedule of Contributions from Employers and Other Contributing Entity disclose the amount of contributions received from participating employers. However, the Schedule of Employer Contributions differs from the Statements of Changes in Fiduciary Net Position in that the Schedule's primary focus is to disclose the contributions required to be made in accordance with the System's funding policy and the percentage of the required contributions actually made during the fiscal years presented.

Finally, the other supplementary schedules, presented immediately after the required supplementary information, summarize the changes in fund balances, disclose major categories of operating and investment expenses, and provide combining, plan-level detail related to asset, liability, income, and expense amounts summarized in the basic financial statements.

ANALYSIS OF FINANCIAL POSITION AND RESULTS OF OPERATIONS.

The System's overall funding objective is to accumulate sufficient assets over time to meet its long-term benefit obligations as they become due. Accordingly, collecting employer and member contributions as well as earning an adequate long-term rate of return on its investments are essential components of the System's plan for accumulating the funds needed to finance future retirement benefits.

Fiscal Year 2024 Compared to 2023

The following condensed comparative Statement of Fiduciary Net Position for the fiscal years ended June 30, 2024 and 2023 reflects an increase of \$3,016.7 million (4.6%) in the System's net position. This increase is primarily due to positive performance returns in public equity and private equity asset classes.

A schedule of the System's investments and changes (by type) for fiscal years 2024 and 2023 is presented below (expressed in millions):

	June 30,		Chang	ge
	2024	2023	Variance	%
Cash & cash equivalents	\$ 2,265.6	\$ 1,373.4	\$ 892.2	65.0%
U.S. Government obligations	5,900.9	6,238.7	(337.8)	-5.4%
Domestic corporate obligations	2,803.7	3,663.1	(859.4)	-23.5%
International obligations	1,703.3	1,585.7	117.6	7.4%
Domestic stocks	10,820.0	10,370.1	449.9	4.3%
International stocks	9,955.5	9,558.1	397.4	4.2%
Mortgages & mortgage-related securities	1,952.8	1,656.8	296.0	17.9%
Alternative investments	32,626.5	30,753.3	1,873.2	6.1%
Total managed investments	68,028.3	65,199.2	2,829.1	4.3%
Collateral for loaned securities	4,848.0	5,687.0	(839.0)	-14.8%
Total investments and cash & cash equivalents	72,876.3	70,886.2	1,990.1	2.8%
Receivables	686.8	716.8	(30.0)	-4.2%
Total Assets	73,563.1	71,603.0	1,960.1	2.7%
Liabilities	5,653.4	6,710.0	(1,056.6)	-15.7%
Total Fiduciary Net Position, End of Year	\$ 67,909.7	\$ 64,893.0	\$ 3,016.7	4.6%

As depicted in the following comparative Statement of Changes in Fiduciary Net Position for fiscal years 2024 and 2023, contributions to the System during fiscal year 2024 increased by \$226.3 million from prior fiscal year due to an increase in covered payroll and the State's continued reinvestment contribution of savings. The System's investments experienced a positive return of 6.9% net of fees in fiscal year 2024 primarily attributable to the System's public equity portfolio rendering the strongest return of 17.9%.

The System continues to pay out more benefits than contributions collected. An increase of \$263.2 million in benefits paid to retirees reflects a continuance of increasing retirements of the baby boomer generation in fiscal year 2024. However, the investment performance was a positive offset contributing to a \$3.0 billion increase in fiduciary net position.

A schedule of the System's additions to and deductions from fiduciary net position and related changes (by major category) for fiscal years 2024 and 2023, is as follows (expressed in millions):

	June 30,		Change	
	2024	2023	Variance	%
Employer contributions	\$ 1,834.1	\$ 1,700.3	\$ 133.8	7.9%
Member contributions	1,056.2	963.7	92.5	9.6%
State contributions on behalf of local governments & contribution interest	784.2	738.6	45.6	6.2%
Net investment income (loss)	4,416.7	1,980.2	2,436.5	123.0%
Total additions	8,091.2	5,382.8	2,708.4	50.3%
Benefit payments	4,916.4	4,653.2	263.2	5.7%
Refunds	107.3	101.7	5.6	5.5%
Administrative expenses	50.8	46.0	4.8	10.4%
Total deductions	5,074.5	4,800.9	273.6	5.7%
Net increase(decrease) in plan net position	<u>\$ 3,016.7</u>	\$ 581.9	\$ 2,434.8	418.4%

Analysis of Net Pension Liability (expressed in millions)

	Jun	June 30, Change		ge
	2024	2023	Variance	%
Total Pension Liability (TPL)	\$ 94,214.1	\$ 87,923.3	\$ 6,290.8	7.2%
Plan Fiduciary Net Position	67,909.7	64,893.0	3,016.7	4.6%
Net Pension Liability	\$ 26,304.4	\$ 23,030.3	\$ 3,274.1	14.2%
Ratio - Fiduciary Net Position/TPL	72.1%	73.8%		

The TPL increased by \$6.3 billion from 2023 to 2024, due to an increase in service cost and an actuarial loss from experience during the measurement period. The Plan Fiduciary Net Position increased by \$3 billion from 2023 to 2024 primarily due to an investment return of 6.9%. These two events when netted increased the Net Pension Liability by \$3.3 billion from 2023 to 2024.

Fiscal Year 2023 Compared to 2022

The following condensed comparative Statement of Fiduciary Net Position for the fiscal years ended June 30, 2023 and 2022 reflects an increase of \$582.1 million (0.9%) in the System's net position. This increase is primarily due to positive performance returns in domestic stocks and private equity asset classes.

A schedule of the System's investments and changes (by type) from fiscal year 2023 to 2022 is presented below (expressed in millions):

	June 30,		Chang	ge
	2023	2022	Variance	%
Cash & cash equivalents	\$ 1,373.4	\$ 2,005.8	\$ (632.4)	-31.5%
U.S. Government obligations	6,238.7	6,705.8	(467.1)	-7.0%
Domestic corporate obligations	3,663.1	3,866.2	(203.1)	-5.3%
International obligations	1,585.7	1,453.2	132.5	9.1%
Domestic stocks	10,370.1	8,004.0	2,366.1	29.6%
International stocks	9,558.1	10,149.8	(591.7)	-5.8%
Mortgages & mortgage-related securities	1,656.8	1,512.0	144.8	9.6%
Alternative investments	30,753.3	30,323.4	429.9	1.4%
Total managed investments	65,199.2	64,020.2	1,179.0	1.8%
Collateral for loaned securities	5,687.0	4,414.8	1,272.2	28.8%
Total investments and cash & cash equivalents	70,886.2	68,435.0	2,451.2	3.6%
Receivables	716.8	1,314.0	(597.2)	-45.4%
Total Assets	71,603.0	69,749.0	1,854.0	2.7%
Liabilities	6,710.0	5,438.1	1,271.9	23.4%
Total Fiduciary Net Position, End of Year	\$ 64,893.0	\$ 64,310.9	\$ 582.1	0.9%

As depicted in the following comparative Statement of Changes in Fiduciary Net Position for fiscal years 2023 and 2022, contributions to the System during fiscal year 2023 increased by \$280.6 million from prior fiscal year as a result of an increase in covered payroll and the State's reinvestment contribution of savings.

The System continues to pay out more benefits than contributions collected. An increase of \$258.8 million in benefits paid to retirees reflects a continuance of increasing retirements of the baby boomer generation in fiscal year 2023. However, the investment performance was a positive offset contributing to a \$0.6 billion increase in fiduciary net position.

A schedule of the System's additions to and deductions from fiduciary net position and related changes (by major category) for fiscal years 2023 and 2022, is as follows (expressed in millions):

	June 30,		June 30,		Change	
	2023	2022	Variance	%		
Employer contributions	\$ 1,700.3	\$ 1,489.1	\$ 211.2	14.2%		
Member contributions	963.7	894.3	69.4	7.8%		
State contributions on behalf of local governments & contribution interest	738.6	793.2	(54.6)	-6.9%		
Net investment income (loss)	1,980.2	(1,942.2)	3,922.4	-202.0%		
Total additions	5,382.8	1,234.4	4,148.4	336.1%		
Benefit payments	4,653.2	4,394.4	258.8	5.9%		
Refunds	101.7	91.5	10.2	11.1%		
Administrative expenses	46.0	42.1	3.9	9.3%		
Total deductions	4,800.9	4,528.0	272.9	6.0%		
Net increase (decrease) in plan net position	<u>\$ 581.9</u>	\$ (3,293.6)	\$ 3,875.5	-117.7%		

Analysis of Net Pension Liability (expressed in millions)

	June 30,		Change	
	2023	2022	Variance	%
Total Pension Liability (TPL)	\$ 87,923.3	\$ 84,319.5	\$ 3,603.8	4.3%
Plan Fiduciary Net Position	64,893.0	64,311.0	582.0	0.9%
Net Pension Liability	\$ 23,030.3	\$ 20,008.5	\$ 3,021.8	15.1%
Ratio - Fiduciary Net Position/TPL	73.8%	76.3%		

The TPL increased by \$3.6 billion from 2022 to 2023, due to an increase in service cost. The plan Fiduciary Net Position increased by \$582 million from 2022 to 2023 primarily due to an investment return of 3.1%. These two events when netted increased the Net Pension Liability by \$3 billion from 2022 to 2023.

Requests for Information

Members of the System's Board of Trustees and senior management are fiduciaries of the pension trust fund and, as such, are charged with the responsibility of ensuring that the System's assets are used exclusively for the benefit of plan participants and their beneficiaries. This financial report is designed to provide an overview of the System's finances and to demonstrate accountability for the resources entrusted to the System for the benefit of all of the System's stakeholders. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

State Retirement and Pension System of Maryland

120 E. Baltimore Street, Suite 1660

Baltimore, Maryland 21202-1600

MARYLAND STATE RETIREMENT AND PENSION SYSTEM

STATEMENTS OF FIDUCIARY NET POSITION

As of June 30, 2024 and 2023

(Expressed in Thousands)

	2024	2023
ASSETS		
Cash & Cash Equivalents	\$ 2,265,618	\$ 1,373,369
Receivables		
Contributions:		
Employers	116,002	77,513
Members	14,634	10,694
Accrued investment income	260,758	195,671
Investment sales proceeds	295,384	432,934
Total receivables	686,778	716,812
Investments, at fair value (Notes 2 & 3)		
U.S. Government obligations	5,900,878	6,238,670
Domestic corporate obligations	2,803,689	3,663,113
International obligations	1,703,310	1,585,721
Domestic stocks	10,820,039	10,370,101
International stocks	9,955,515	9,558,092
Mortgages & mortgage-related securities	1,952,783	1,656,754
Alternative investments	32,626,455	30,753,252
Collateral for loaned securities	4,848,015	5,686,982
Total investments	70,610,684	69,512,685
Total Assets	73,563,080	71,602,866
LIABILITIES		
Accounts payable & accrued expenses (Note 7)	71,376	57,797
Investment commitments payable	733,981	965,114
Obligation for collateral for loaned securities	4,848,015	5,686,982
Total Liabilities	5,653,372	6,709,893
Fiduciary Net Position Restricted for Pensions	<u>\$ 67,909,708</u>	<u>\$ 64,892,973</u>

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

MARYLAND STATE RETIREMENT AND PENSION SYSTEM

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

for the Fiscal Years Ended June 30, 2024 and 2023

(Expressed in Thousands)

	2024	2023
ADDITIONS		
Contributions:		
Employers	\$ 1,834,051	\$ 1,700,314
Members	1,056,173	963,702
State contributions on behalf of local governments	784,265	738,603
Total contributions	3,674,489	3,402,619
Investment Income:		
Net appreciation (depreciation) in fair value of investments	1,891,910	(496,268)
Interest	694,863	576,551
Dividends	2,242,095	2,306,842
Income before securities lending activity	4,828,868	2,387,125
Gross income from securities lending activity	311,150	226,992
Securities lending borrower rebates	(287,921)	(202,127)
Securities lending agent fees	(1,161)	(1,243)
Net income from securities lending activity	22,068	23,622
Total investment income	4,850,936	2,410,747
Investment expenses	(434,161)	(430,470)
Net investment income	4,416,775	1,980,277
TOTAL ADDITIONS	8,091,264	5,382,896
DEDUCTIONS		
Benefit payments	4,916,425	4,653,163
Refunds (Note 6)	107,308	101,737
Administrative expenses (Note 2)	50,796	46,014
TOTAL DEDUCTIONS	5,074,529	4,800,914
Net increase in fiduciary net position	3,016,735	581,982
Fiduciary Net Position Restricted for Pensions		
Beginning of the fiscal year	64,892,973	64,310,991
END OF THE FISCAL YEAR	\$ 67,909,708	\$ 64,892,973

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

NOTES TO THE FINANCIAL STATEMENTS

1. GENERAL DESCRIPTION OF THE SYSTEM

A. Organization

The State Retirement Agency (the Agency) is the administrator of the Maryland State Retirement and Pension System (the 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 15-member Board of Trustees. The System is a cost-sharing multiple-employer defined benefit plan made up of two cost-sharing employer pools: the "State Pool" and the "Municipal Pool." The "State Pool" consists of the State agencies, boards of education, community colleges, and libraries. The "Municipal Pool" consists of the participating governmental units that elected to join the System. Neither pool shares in each other's actuarial liabilities, thus participating governmental units that elect to join the System (the "Municipal Pool") share in the liabilities of the Municipal Pool only. Although separate valuations are performed for each pool, all assets accumulated in the plan may legally be used to pay benefits to any member.

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 State is obligated to annually pay into the accumulation fund of each State system at least an amount that, when combined with the System's accumulation funds, is sufficient to provide benefits payable under each plan during that fiscal year. The System is accounted for as a cost-sharing multiple-employer defined benefit plan as defined in accordance with accounting principles generally accepted in the United States of America. 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 as a fiduciary component unit and disclosed in its financial statements as a pension trust fund.

The System is comprised of the Teachers' Retirement and Pension Systems, Employees' Retirement and Pension Systems, State Police Retirement System, Judges' Retirement System, and the Law Enforcement Officers' Pension 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, became members of the Teachers' Pension System as a condition of employment. On or after January 1, 2005, an individual who is a member of the Teachers' Retirement System may not transfer membership to the Teachers' Pension System.

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, became 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 may not transfer membership to the Employees' Pension System. Currently, more than 150 governmental units participate in the Employees' Retirement System.

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 (LEOPS) was established on July 2, 1990, to provide retirement allowances and other benefits for certain State and local law enforcement officers. 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 LEOPS, were members of the Employees' Retirement System. This System's pension plan provisions are applicable to all other participating law enforcement officers.

The following tables present a summary of membership by system as of June 30, 2024 and 2023, with comparative prior year totals:

	Inactive & Deferred Vested	Retirees &	Active Plan Participants Vested Non-vested Tota		nts Total
Teachers' Retirement & Pension Systems	23,494	84,975	61,192	54,124	115,316
Employees' Retirement & Pension Systems*	22,203	85,479	38,155	46,946	85,101
Judges' Retirement System	8	471	223	99	322
State Police Retirement System	85	2,638	817	495	1,312
Law Enforcement Officers' Pension					
System	309	2,608	1,469	1,524	2,993
Totals as of June 30, 2024	46,099	176,171	101,856	103,188	205,044
Totals as of June 30, 2023	47,087	174,609	100,835	97,812	198,647

(*) Employees' Retirement and Pension Systems include 68 vested and 85 non-vested active members, 1 deferred vested members, and 71 retired members from the Correctional Officers Retirement System.

	Inactive & Deferred	Retirees &	Active Plan Participants		
	Vested	Beneficiaries	Vested	Non-vested	Total
Teachers' Retirement & Pension Systems	23,702	84,177	60,297	52,476	112,773
Employees' Retirement & Pension Systems*	22,976	84,846	38,111	43,225	81,336
Judges' Retirement System	8	468	220	106	326
State Police Retirement System	88	2,606	809	526	1,335
Law Enforcement Officers' Pension System	313	2,512	1,398	1,479	2,877
Total as of June 30, 2023	47,087	174,609	100,835	97,812	198,647
Fotal as of June 30, 2022	47,503	172,235	100,984	93,226	194,210

(*) Employees' Retirement and Pension Systems include 75 vested and 80 non-vested active members, 8 deferred vested members, and 63 retired members from the Correctional Officers Retirement System.

C. Summary of Significant Plan Provisions

All plan benefits are specified by the State Personnel and Pensions Article of the Annotated Code of Maryland. For all individuals who are members of the Employees', Teachers', Correctional Officers', or State Police Retirement System on or before June 30, 2011, retirement allowances are computed using both the highest three years' Average Final Compensation (AFC) and the actual number of years of accumulated creditable service. For individuals who become members of the State Police Retirement System or the Correctional Officers' Retirement System on or after July 1, 2011, retirement allowances are computed using both the highest five years' AFC and the actual number of years of accumulated creditable service. For all individuals who are members of the pension systems of the State Retirement and Pension System on or before June 30, 2011, pension allowances are computed using both the highest three consecutive years' AFC and the actual number of years of accumulated creditable service. For any individual who becomes a member of one of the pension systems on or after July 1, 2011, pension allowances are computed using both the highest five years' AFC and the actual number of years of accumulated creditable service. For any individual who becomes a member of one of the pension systems on or after July 1, 2011, pension allowances are computed using both the highest five consecutive years' AFC and the actual number of years of accumulated creditable service. Various retirement options are available under each system which ultimately determines how a retiree's benefit allowance will be computed. Some of these options require actuarial reductions based on the retiree's and/or designated beneficiary's attained age and similar actuarial factors.

The member contribution rate for members of the Teachers' Retirement Pension System and Employees' Retirement Pension System is 7% and 6%, respectively, and 7% for members of the Law Enforcement Officers' Pension System. The member contribution rate for members of the Judges' Retirement System is 8%.

In addition, the benefit attributable to service on or after July 1, 2011 in many of the pension systems now will be subject to different cost-of-living adjustments (COLA) that is based on the increase in the Consumer Price Index (CPI) and capped at 2.5% or 1.0% based on whether the fair value investment return for the preceding calendar year was higher or lower than the investment return assumption used in the valuation.

A brief summary of the retirement eligibility requirements of and the benefits available under the various systems in effect during fiscal year 2024 are as 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 creditable service regardless of age. The annual retirement allowance equals 1/55 (1.81%) of the member's AFC multiplied by the number of years of accumulated creditable service.

An individual who is a member of either the Teachers' or Employees' Pension System on or before June 30, 2011, 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. An individual who becomes a member of either the Teachers' or Employees' Pension System on or after July 1, 2011, is eligible for full retirement benefits if the member's combined age and eligibility service equals at least 90 years, or if the member is at least age 65 and has accrued at least 10 years of eligibility service.

For most individuals who retired from either the Teachers' or Employees' Pension System on or before June 30, 2006, the annual pension allowance equals 1.2% of the member's AFC, multiplied by the number of years of creditable service accumulated prior to July 1, 1998, plus 1.4% of the member's AFC, multiplied by the number of years of creditable service accumulated subsequent to June 30, 1998. With certain exceptions, for individuals who are members of the Teachers' or Employees' Pension System on or after July 1, 2006, the annual pension allowance equals 1.2% of the member's AFC, multiplied by the number of years of creditable service accumulated prior to July 1, 1998, plus 1.8% of the member's AFC, multiplied by the number of years of creditable service accumulated subsequent to June 30, 1998. Beginning July 1, 2011, any new member of the Teachers' or Employees' Pension System shall earn an annual pension allowance equal to 1.5% of the member's AFC multiplied by the number of years of creditable service accumulated service accumulated as a member of the Teachers' or Employees' Pension System.

Exceptions to these benefit formulas apply to members of the Employees' Pension System, who are employed by a participating governmental unit that does not provide the 1998 or 2006 enhanced pension benefits or the 2011 reformed pension benefits. The pension allowance for these members equals 0.8% of the member's AFC up to the social security integration level (SSIL), plus 1.5% of the member's AFC 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 past 35 calendar years ending with the year the retiree separated from service.

An individual who is a member of the State Police Retirement System on or before June 30, 2011, is eligible for full retirement benefits upon the earlier of attaining age 50 or accumulating 22 years of eligibility service regardless of age. An individual who becomes a member of the State Police Retirement System on or after July 1, 2011 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 2.55% of the member's AFC multiplied by the number of years of accumulated creditable service and may not exceed 71.4% of the member's AFC.

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 AFC multiplied by the number of years of accumulated creditable service up to 30 years, plus 1/100 (1.0%) of the member's AFC multiplied by the number of years of accumulated creditable service in excess of 30 years. For members subject to the pension provisions, full-service pension allowances equal 2.0% of AFC up to a maximum benefit of 60% (30 years of credit).

Vested Allowances

Any individual who is a member of the State Retirement and Pension System on or before June 30, 2011 (other than a judge or a legislator), and who terminates employment before attaining retirement age but after accumulating five years of eligibility service is eligible for a vested retirement allowance. Any individual who joins the State Retirement and Pension System on or after July 1, 2011 (other than a judge or a legislator), and who terminates employment before attaining retirement age, but after accumulating 10 years of eligibility service, is eligible for a vested retirement allowance. An individual who is a member of the Judges' Retirement System on or before June 30, 2014, has no minimum service requirements prior to vesting. However, individuals who join the Judges' Retirement System on or after July 1, 2013, and terminate employment before attaining retirement age, will have to accrue five years of eligibility service in order to receive a vested retirement allowance. Legislators become eligible for a vested retirement allowance upon accumulating eight years of eligibility services. A member, who terminates employment prior to attaining retirement age and before vesting, 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 creditable service, whichever is less. The maximum reduction for a Teachers' or Employees' Retirement System member is 30%.

An individual who is a member of either the Teachers' or Employees' Pension System on or before June 30, 2011, 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 these members of the Teachers' or Employees' Pension System is 42%. An individual who becomes a member of either the Teachers' or Employees' Pension System on or after July 1, 2011, may retire with reduced benefits upon attaining age 60 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 65. The maximum reduction for these members of the Teachers' or Employees' Pension for these members of the Teachers' or Employees' Pension for these members of the Teachers' or Employees' Pension for these members of the Teachers' or Employees' Pension for these members of the Teachers' or Employees' Pension for these members of the Teachers' or Employees' Pension for these members of the Teachers' or Employees' Pension for these members of the Teachers' or Employees' Pension System is 30%.

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 five years of service receives a service allowance based on a minimum percentage (usually 25%) of the member's AFC. A member covered under pension plan provisions who is permanently disabled after accumulating five 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 dis- ability 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 AFC 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. Such adjustments for retirees are based on the annual change in the CPI. For the Teachers' and Employees' Retirement Systems (TRS/ERS) the method by which the annual COLA's are computed depends upon elections made by members who were active on July 1, 1984 (or within 90 days of returning to service, for members who were inactive on July 1, 1984) enabling the member to receive either an unlimited COLA, a COLA limited to 5% or a two-part combination COLA depending upon the COLA election made by the member.

Members of the State Police Retirement System (SPRS) and Law Enforcement Officers' Pension System (LEOPS) are eligible to participate in a Deferred Retirement Option Program (DROP). For members who enter the DROP on or after July 1, 2011, the member is deemed retired and the retirement allowance is placed in an account earning 4% inter- est per year, compounded annually. At the end of the DROP period, the lump sum held in the DROP account is paid to the retiree. The SPRS and LEOPS members must end employment and fully retire at the end of the DROP period. The maximum period of participation is 5 years for SPRS and 5 years for LEOPS. The amount of funds held in the DROP as of June 30, 2024 and 2023, was \$40,932,782 and \$34,051,372, respectively.

However, beginning July 1, 2011, for benefits attributable to service earned on or after July 1, 2011, in all of the systems except the judges' and legislators' systems, the adjustment is capped at the lesser of 2.5% or the increase in CPI if the most recent calendar year fair value rate of return was greater than or equal to the assumed rate. The adjustment is capped at the lesser of 1% or the increase in CPI if the fair value return was less than the assumed rate of return. In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied, and the zero COLA is fully recovered.

Retirement allowances for legislators and judges are recalculated when the salary of an active member holding a comparable position is increased.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Accounting

The System's financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America. Accordingly, investment purchases and sales are recorded as of their respective trade dates. Employer and Member contributions are recognized in the period when due, pursuant to statutory or contractual requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

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 Maryland State Retirement and Pension System.

C. Portfolio Valuation Method

The System's investments are reported at fair value. Fair value is the amount that the System can reasonably expect to receive for an investment in a current sale. See Note 3.H for the description of investments at fair value.

Investment amounts presented in the accompanying Statements of Fiduciary Net Position represent the fair value of the respective portfolios as of the fiscal year-end. Similarly, investment income amounts reported in the accompanying Statements of Changes in Fiduciary Net Position represent the income or loss derived for the years then ended. Accordingly, significant market fluctuations could periodically occur subsequent to the financial statement valuation date, which are not reflected in either the fair value of investments or the related investment income presented in these financial statements.

D. Derivatives

As permitted by guidelines established by the Board of Trustees, the System may invest in derivatives. Compliance with these guidelines is monitored by Agency staff. Pursuant to such authority, the System invests in foreign currency forward contracts, options, futures, and swaps. The Agency does not purchase rights and warrants; however, it can accrue ownership through corporate actions. 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 currency valuations or interest rates. 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 enters into forward foreign currency exchange contracts for hedging purposes to minimize the short-term impact of foreign currency fluctuations. Foreign currency exchange contracts are reported at fair value based on published market prices and quotations from major investment firms. The System could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. The System seeks to minimize risk from counterparties by establishing minimum credit quality standards.

E. Administrative and Investment Expenses

All of the System's administrative and investment expenses (e.g., salaries of Agency employees, investment advisory fees, etc.) are incurred centrally and charged to each individual retirement or pension system on the basis of its active membership and percent- age ownership in the System's net position, respectively. The System's investment expenses are funded from investment income. The System's administrative expenses are funded from administrative fees assessed to each participating employer. See page 86 for detailed Schedules of Administrative and Investment Expenses.

F. Federal Income Tax Status

During the fiscal years ended June 30, 2024 and 2023, the System qualified under Section 401(a) of the Internal Revenue Code (the Code) and was exempt from Federal income taxes under Section 501(a) of the Code.

3. CASH, CASH EQUIVALENTS, AND INVESTMENTS

A. Legal Provisions

The Board of Trustees is required by Section 21-116 (c), State Personnel and Pensions Article, Annotated Code of Maryland (SPP), to establish and maintain an Investment Policy Manual (IPM), which is available on the Agency's web site. The IPM authorizes investing in all major sectors of the capital market in order to diversify and minimize total investment program risk. Such sectors include, but are not limited to:

		As of June 30, 2024	
Туре	Description	Strategic Target	Actual
Public Equity	Investments in securities, known as shares or stocks, that represent an ownership interest in corporations and are generally traded on a stock exchange.	34.0%	30.7%
Private Equity	Investments in companies that are not registered with the SEC and are not traded in the public markets. Private equity may also be referred to as venture capital or buy-outs.	16.0%	21.7%
Rate Sensitive	Investments in securities, know as bonds, that represent an ownership interest in the debt of governments and corporations that are generally not traded on an exchange. They generally pay interest on a regular schedule and repay principal or face value at maturity. Short term investments such as money market funds U.S. treasury bills and currency are also included.	20.0%	16.5%
Credit/Debt Related Strategies	Debt issued by corporations and other non-government sectors of the fixed income market such as distressed debt, convertibles, corporate and mortgage related credit strategies, mezzanine debt, bank loans, high yield, emerging markets and preferred securities.	9.0%	8.9%
Absolute Return	Investments whose performance is expected to exceed the three month U.S. Treasury bill by 4-5% over a full market cycle and exhibit low correlation to public stocks. The System's program may include strategies such as hedge fund of funds, multi- strategy, global tactical asset allocation, event driven, relative value, macro, insurance and equity hedged.	6.0%	5.8%
Real Assets	Investments whose performance is expected to exceed the rate of inflation over an economic cycle. The System's Real Return program may include the following investment vehicles in both public and private investments: energy related, infrastructure, timber and other natural resources, multi-asset class portfolios with a real return mandate, and real estate including direct investments, REITs and private partnerships.	15.0%	14.2%
Cash/Cash Equivalents	Investments that provide daily liquidity and either have very low risk or principal loss such as treasury bills or high quality commercial paper.	0.0%	1.8%
Multi Assets	Investments that act as a proxy for all overall Asset allocation through a combination of Exchange Traded Funds and fully funded Futures contracts.	0.0%	0.4%

The above listed strategic targets were implemented in stages throughout the fiscal year. All asset classes are within the transitional target ranges.

The System is authorized by its Board of Trustees to operate a securities lending program and has contracted with Deutsche Bank to lend securities and reinvest cash collateral received from the transfer of securities in investment instruments authorized by the investment policy. Currently, the initial required collateral for foreign securities is equal to 105 percent of the aggregate market value of the transferred securities not denominated in the same currency as the collateral provided by the counterparty and 102 percent for domestic securities and foreign securities that are denominated in the same currency as the collateral provided by the counterparty. See section G of this note for additional information.

B. Cash and Cash Equivalents

The Cash and Cash Equivalents category reported on the Statement of Fiduciary Net Position consists of short-term investments that are used to meet the liquidity requirements of the System.

Cash and Cash Equivalents held by the System can include cash on deposit, foreign currencies, cash posted as collateral to counterparties, repurchase agreements, certificate of deposit, U.S. Treasury Bills, short-term investment funds, and other U.S. or foreign liquid financial instruments with original maturities that are generally less than three months. Cash and Cash Equivalents are reported at fair value or cost, which approximates fair value.

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the System's deposits may not be returned to it.

The System does not have any funds or deposits that are not covered by depository insurance, which are either uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging financial institution's trust department or agent, but not in the System's name and there are no legal or contractual provisions for deposits and investments. Nor does the System have any investments that are not registered in its name and are either held by the counterparty or the counterparty's trust department or agent, but not in the System's name.

The amount of the System's total Cash and Cash Equivalents as of June 30, 2024 and 2023, was \$2,265,618 and \$1,373,369 (in thousands), respectively.

C. Investments

These investments are accounted for as the System and are allocated to Teachers' Retirement and Pension, Employees' Retirement, State Police Retirement and Law Enforcement Officers' Pension.

All investments are governed by the Prudent Person Rule as described in SPP Section 21-203 which states: A fiduciary shall discharge the fiduciary's duties with respect to the several systems solely in the interest of the participants and as follows: (1) for the exclusive purposes of providing benefits to the participants and for reasonable expenses of administering the several systems; (2) with the care, skill, prudence, and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims; (3) by diversifying the investments of the several systems so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so: (4) in accordance with the laws governing the several systems; and (5) in accordance with the documents and instruments governing the several systems to the extent that the documents and instruments are consistent with this subtitle.

D. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As of June 30, 2024 and 2023, the System had the following fixed income investments allocated by year of maturity except for the Commingled Funds, which are based on their average maturity:

				A	As of	f June 30, 202	24			
	F	air Value			Ir	nvestment Ma	atur	ities (in years	5)	
Туре:	(in	thousands)	Less	Less than 1		1 thru 5	5+ thru 10		More than 10	
Asset Backed Securities	\$	142,618	\$	74	\$	35,355	\$	32,251	\$	74,938
Bank Loans		13,611		_		11,280		2,331		_
Collateralized mortgage obligations		383,046		429		21,425		17,245		343,947
Credit/debt commingled funds		1,781,121		123,678		1,202,523		379,226		75,694
Domestic Corporate Obligations		2,594,757		42,152		1,143,821		970,728		438,056
International Obligations		397,664		6,429		159,659		134,797		96,779
Mortgage Pass-throughs		1,572,872		179		1,713		24,746		1,546,234
Municipals		41,735		_		3,765		10,047		27,923
Options		(478)		(478)		-		-		_
Short term		1,793,806		138,408		-		1,638,364		17,034
Swaps		7,951		(283)		(8,448)		2,290		14,392
U.S. Government Agency		19,935		_		592		10,079		9,264
U.S. Treasury Inflation Linked		2,257,271		1,055		1,222,367		594,997		438,852
U.S. Treasury Notes/Bonds		3,532,443		528		35,242		75,336		3,421,337
U.S. Treasury Strips		91,764		_		-		1,504		90,260
Yankee Bonds		1,266,954		50,083		497,969		372,174		346,728
Total	\$	15,897,070	\$	362,254	\$	4,327,263	\$	4,266,115	\$	6,941,438

			A	As o	f June 30, 202	23			
	F	air Value		Iı	nvestment Ma	atur	ities (in years)	
Туре:	(in	thousands)	Less than 1		1 thru 5	4	5+ thru 10	N	Iore than 10
Asset Backed Securities	\$	142,906	\$ 106	\$	31,366	\$	30,585	\$	80,849
Bank Loans		487,715	18,858		326,514		142,343		-
Collateralized mortgage obligations		436,705	21		8,838		29,404		398,442
Credit/debt commingled funds		1,211,885	29,249		883,780		298,856		-
Domestic Corporate Obligations		2,915,025	30,242		1,116,456		1,276,481		491,846
International Obligations		336,270	630		98,784		111,915		124,941
Mortgage Pass-throughs		1,225,998	15		3,854		14,268		1,207,861
Municipals		48,040	743		3,104		12,140		32,053
Options		(5,212)	(5,212)		_		-		-
Short term		713,578	67,577		(3,772)		621,584		28,189
Swaps		(997)	(4,128)		202		(5,163)		8,092
U.S. Government Agency		31,078	_		621		10,345		20,112
U.S. Treasury Inflation Linked		2,272,403	_		1,095,244		821,459		355,700
U.S. Treasury Notes/Bonds		3,916,788	3,383		44,323		157,128		3,711,954
U.S. Treasury Strips		18,745	_		_		_		18,745
Yankee Bonds		1,171,089	34,892		452,683		339,807		343,707
Total	\$	14,922,016	\$ 176,376	\$	4,061,997	\$	3,861,152	\$	6,822,491

Markets or interest rate risk is the greatest risk faced by an investor in the fixed income market. The price of a fixed income security typically moves in the opposite direction of the change in interest rates. Derivative securities, variable rate investments with coupon multipliers greater than one, and securities with long terms to maturity are examples of investments whose fair values may be highly sensitive to interest rate changes. These securities are reported at fair value in the Statements of Fiduciary Net Position.

Securities that would qualify as "highly interest rate sensitive" include interest only, principal only and inverse floaters, of which the System had no significant holdings as of June 30, 2024 and 2023.

As of June 30, 2024 and 2023, the System had \$1,572,872 and \$1,225,998 (in thousands), respectively, invested in mortgage pass-through securities issued by the Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, and Government National Mortgage Association. These investments are moderately sensitive to changes in interest rates because they are backed by mortgage loans in which the borrowers have the option of prepaying.

Investment guidelines developed for each mandate determines the amount of interest rate risk allowable for each manager. Derivatives held as of June 30, 2024 and 2023, are identified in greater detail in Note 4.

E. Credit Risk

Credit risk is the risk that an issuer or other counterparty to a debt instrument will not fulfill its obligations. This is measured by the assignment of ratings by nationally recognized statistical rating organizations. The ratings used to determine the quality of the individual securities in the table below are the ratings provided by Moody's and Standard & Poor's Global Inc. The listed ratings are based on the most conservative rating when multiple ratings were offered. Obligations issued or guaranteed by the U.S. government or government-sponsored agencies are eligible without limit. The System may invest in an unrated security if the security is comparable in quality to other rated securities that are eligible for purchase. The notation NR represents those securities that are not rated for which the rating disclosure requirements are not applicable, such as commingled short term and credit funds, mortgage securities, foreign sovereign bonds and bank loans which by nature do not have credit quality ratings. The current policy regarding credit risk is determined by each investment manager's mandate.

As of June 30, 2024 and June 30, 2023, the credit ratings of fixed income securities are shown below as a percentage of total investments:

Rating	2024 Fair Value	Percentage Total Investments	2023 Fair Value	Percentage Total Investments
AAA	\$ 90,249	0.128%	\$ 97,721	0.141%
AA	207,614	0.294%	256,513	0.369%
A	599,473	0.849%	598,895	0.862%
BBB	1,239,439	1.755%	1,231,213	1.771%
BB	1,106,499	1.567%	1,207,899	1.738%
В	747,691	1.059%	825,537	1.188%
CCC	94,962	0.134%	90,121	0.130%
CC	4,415	0.006%	1,643	0.002%
С	-	0.000%	9	0.000%
D	10,051	0.014%	12,090	0.017%
NR*	5,915,202	8.377%	4,392,439	6.319%
Total Exposed to Credit Risk	\$ 10,015,595		\$ 8,714,080	
U.S. Government Guaranteed**	5,881,475		6,207,936	
Total Fixed Income and Short-Term Investments	\$ 15,897,070		\$ 14,922,016	

Credit Quality Distribution for Securities with Credit Exposure as a Percentage of Total Investments

(*)NR represents securities not rated.

(**)Comprised of U.S. government and agency obligations explicitly guaranteed by the U.S. Government.

The current policy regarding credit risk is determined by each investment manager's mandate. The above listed ratings are based on the most conservative rating when multiple ratings were offered.

F. Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Systems investment exposure in foreign currency risk as of June 30, 2024 and 2023, is shown below:

International Inv						as of June	30, 2	2024		
		(U.S. Dolla	rs in	Thousands)				Iternative		
<u> </u>		-		Fixed		<i>a</i> .	-			
Currency	*	Equity	*	Income	*	Cash		ivestments		Total
Australian Dollar	\$	247,244	\$	-	\$	5,688	\$	130,164	\$	383,096
Brazilian Real		7,860		(712)		157		-		7,305
Canadian Dollar		402,880		(217)		293		210,504		613,460
Czech Koruna		-		-		5		-		5
Danish Krone		167,642		-		278		-		167,920
Egyptian Pound		19,136		-		-		-		19,136
Euro Currency		1,679,203		80,921		14,295		1,607,252		3,381,671
Hong Kong Dollar		172,923		-		592		48,059		221,574
Hungarian Forint		882		-		33		-		915
Indonesian Rupiah		20,085		-		-		-		20,085
Japanese Yen		1,020,037		106		5,567		16,349		1,042,059
Mexican Peso		32,476		11,559		2,126		-		46,161
New Israeli Sheqel		20,796		-		76		-		20,872
New Taiwan Dollar		56,623		-		22		-		56,645
New Zealand Dollar		7,556		11,612		777		7,388		27,333
Norwegian Krone		55,621		-		204		-		55,825
Polish Zloty		-		(1,465)		2,531		-		1,066
Pound Sterling		660,359		26,951		9,831		262,649		959,790
Singapore Dollar		56,084		-		379		_		56,463
Sol		_		9,903		542		_		10,445
South African Rand		64,086		1,861		523		_		66,470
South Korean Won		111,267		_		24		_		111,291
Swedish Krona		130,406		_		164		_		130,570
Swiss Franc		424,497		_		102		5,077		429,676
Thailand Baht		8,503		_		_		-		8,503
Turkish Lira		2,979		_		33		_		3,012
UAE Dirham		22,306		_		_		_		22,306
Yuan Renminbi		14,267		_		_		_		14,267
Total foreign currency risk	\$	5,405,718	\$	140,519	\$	44,242	\$	2,287,442	\$	7,877,921
Other holdings with potential exposure to foreign currency risk	•	5,060,338		1,308,668		_		2,351,934	,	8,720,940
Total investments subject to foreign										
currency risk *	\$	10,466,056	\$	1,449,187	\$	44,242	\$	4,639,376	\$	16,598,861

(*) Includes Derivatives

		(U.S. L	ona	rs in Thousan	usj			•		
Currency		Equity		Fixed Income		Cash		lternative vestments		Total
Australian Dollar	\$	241,969	\$		\$	10,064	\$	140,659	\$	392,692
Brazilian Real	+	1,858	Ť	695	*	652	+		*	3,205
Canadian Dollar		368,081		(1,901)		3,555		236,642		606,377
Chilean Peso				(-,, -		11				11
Czech Koruna		_		_		44		_		44
Danish Krone		169,623		_		1,101		_		170,724
Egyptian Pound		24,452		_		245		_		24,697
Euro Currency		1,547,288		84,016		23,383		1,645,887		3,300,574
Hong Kong Dollar		208,309		_		1,693		60,721		270,723
Hungarian Forint		466		_		26		, _		492
Indonesian Rupiah		60,460		9,368		1,592		_		71,420
Japanese Yen		963,441		(412)		6,124		20,397		989,550
Malaysian Ringgit		179		_		-		-		179
Mexican Peso		65,367		12,967		1,708		_		80,042
New Israeli Shekel		34,124		-		72		_		34,196
New Taiwan Dollar		62,734		_		59		_		62,793
New Zealand Dollar		13,551		10,346		1,687		8,797		34,381
Norwegian Krone		61,411		_		892		_		62,303
Philippine Peso		702		_		24		_		726
Polish Zloty		416		(1,765)		2,794		_		1,445
Pound Sterling		596,593		37,063		6,514		273,861		914,031
Qatari Rial		156		_		_		_		150
Singapore Dollar		56,055		_		116		_		56,171
Sol		_		_		573		_		573
South African Rand		106,772		1,675		1,017		_		109,464
South Korean Won		194,790		_		78		-		194,868
Swedish Krona		106,541				2,674		_		109,215
Swiss Franc		387,168		_		1,968		5,479		394,615
Thailand Baht		20,514		_		8		-		20,522
Turkish Lira		2,663		_		21		_		2,684
UAE Dirham		34,401		_		_		_		34,401
Yuan Renminbi		(13,514)		_		25,684		-		12,170
Total foreign currency risk	\$	5,316,570	\$	152,052	\$	94,379	\$	2,392,443	\$	7,955,444
Other holdings with potential of exposure to foreign currency risk		5,574,733		1,288,714		_		2,449,601		9,313,048
Total investments subject to foreign currency risk *	\$	10,891,303	\$	1,440,766	\$	94,379	\$	4,842,044	\$	17,268,492

International Investment Securities – At Fair Value as of June 30, 2023

The majority of foreign currency-denominated investments are in non-US stocks.

The Agency has an overlay program to help minimize its currency risk.

Note: These schedules do not agree with the total international obligations and international equities as listed on the Statement of Fiduciary Net Position due to private and public partnerships or funds and American Depository Receipts which are valued in U.S. dollars but classified as International.

G. Securities Lending Transactions

The System accounts for securities lending transactions in accordance with GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions.

The following table details the net income from securities lending for the years ended June 30, 2024 and 2023 (in thousands):

	 2024	 2023
Interest income	\$ 311,150	\$ 226,992
Less:		
Interest expense	287,921	202,127
Program fees	1,161	1,243
Expenses from securities lending	 289,082	 203,370
Net income from securities lending	\$ 22,068	\$ 23,622

The Board of Trustees has authorized the System to lend its securities to broker-dealers with a simultaneous agreement to return the col- lateral for the same securities in the future. Deutsche Bank, pursuant to a written agreement, is permitted to lend long-term securities to authorized broker-dealers subject to the receipt of acceptable collateral. The System lends securities for collateral in the form of either cash or other securities. The types of securities on loan as of June 30, 2024 included long- term U.S. government obligations, domestic and international equities, as well as domestic and international debt obligations. At the initiation of a loan, borrowers are required to provide collateral amounts of 102 percent (domestic securities and foreign securities that are denominated in the same currency as the collateral provided by the counterparty) and 105 percent (foreign securities that are not denominated in the same currency as the collateral provided by the counterpart). In the event the collateral fair value falls below 100 percent on foreign securities not denominated in the same currency as the collateral provided by the counterpart, the borrower is required to provide additional collateral to the original levels by the end of the next business day. Deutsche Bank is obligated to indemnify the client if there are any losses of securities, collateral or investments of the client in the Bank's custody arising out of or related to the negligence or dishonesty of the Bank.

The System maintains the right to terminate the securities lending transactions upon notice. The lending agent reinvests the cash collateral received on each loan utilizing indemnified repurchase agreements (repos). As of June 30, 2024, such repos had average days to maturity of 44.77 days. The System cannot pledge or sell collateral securities received unless (and until) a borrower defaults. At year-end, the System had no credit risk exposure to borrowers because the amount the System owed the borrowers exceeded the amount the borrowers owed the System. The fair value of securities on loan and the fair value collateral held for the System as of June 30, 2024 (in thousands) was \$4,736,708 and \$4,848,015, respectively. The fair value of securities on loan and the fair value collateral held for the System, and the fair value collateral held for the System of June 30, 2024 (in thousands) was \$4,736,708 and \$4,848,015, respectively. The fair value of securities on loan and the fair value collateral held for the System of June 30, 2024 (in thousands) was \$5,579,021 and \$5,686,982, respectively.

The following tables present the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2024 and 2023 (in thousands):

			As o	f June 30, 2024	
Securities Lent	_	Fair Value Loaned Securities		Collateral Fair Value	Percent Collateralized
Lent for cash collateral					
U.S. government and agency	\$	3,331,025	\$	3,408,514	102.3%
Domestic bond & equity		1,371,211		1,403,473	102.4%
International fixed		9,614		9,829	102.2%
International equity		24,858		26,199	105.4%
Total securities lent	\$	4,736,708	\$	4,848,015	102.3%

	As of June 30, 2023									
Securities Lent		Fair Value Loaned Securities		Collateral Fair Value	Percent Collateralized					
Lent for cash collateral										
U.S. government and agency	\$	3,433,594	\$	3,505,835	102.1%					
Domestic bond & equity		2,121,779		2,156,481	101.6%					
International fixed		3,225		3,279	101.7%					
International equity		20,423		21,387	104.7%					
Total securities lent	\$	5,579,021	\$	5,686,982	101.9%					

There were no significant under-collateralization events as of June 30, 2024 and 2023.

H. Investments at Fair Value

The System follows the fair value measurement and disclosure guidance under U.S. GAAP, which establishes a hierarchical disclosure framework. This framework prioritizes and ranks the level of market price observability used in measuring investments at fair value. U.S. GAAP also allows investments to be valued at cost or net asset value (NAV).

Assets and liabilities measured at fair value are classified into one of the following categories:

Level 1 – Fair value is determined using unadjusted quoted prices in active markets for identical assets or liabilities accessible on the measurement date.

Level 2 – Fair value is determined using quoted prices in inactive markets or significant observable inputs (including, but not limited to, quoted prices for similar investments, interest rates, foreign exchange rates, volatility and credit spreads), either directly or indirectly. These inputs may be derived principally from, or corroborated by, observable market data through cor- relation or by other means.

Level 3 – Fair value is determined using unobservable inputs, including situations where there is little market activity, if any, for the asset or liability.

The System had the following recurring fair value measurements as of June 30, 2024 and 2023:

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Debt securities classified in Level 2 of the fair value hierarchy are valued using a combination of prevailing market prices and interest payments that are discounted at prevailing interest rates for similar instruments.

Derivative instruments classified in Level 2 of the fair value hierarchy are valued using a market approach that considers benchmark interest rates and foreign exchange rates.

Commercial and residential mortgage-backed securities classified in Level 3 are valued using discounted cash flow techniques. Collateralized debt obligations classified in Level 3 are valued using consensus pricing.

As of June 30, 2024 and 2023, the System had the following recurring fair value measurements:

As of June 30, 2024	 Total	i M Ider	oted Prices in Active arkets for ntical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant nobservable Inputs (Level 3)
Investments by fair value level (expressed in millions)					
Debt Securities					
U.S. Government obligations	\$ 5,901	\$	5,901	\$ -	\$ -
Domestic corporate obligations	2,790		-	2,790	_
International obligations	976		-	976	_
Emerging markets debt	730		-	730	_
Mortgages & mortgage related securities	 1,953		-	 -	 1,953
Total debt securities	12,350		5,901	 4,496	1,953
Equity Securities					
Domestic stocks (includes REITs)	7,107		7,107	_	_
International stocks (includes (REITs)	 6,848		6,848	 -	 -
Total equity securities	 13,955		13,955	 -	_
Alternative Investments	 393		393	 _	 _
Total investment by fair value level	 26,698	\$	20,249	\$ 4,496	\$ 1,953
Investment measured at the net asset value (NAV)					
Equity Open-End Fund	6,821				
Real Estate Open-End Fund	4,814				
Private Funds (includes equity, real estate, credit, energy, infrastructure, timber)	22,309				
Multi-asset	258				
Hedge Funds					
Equity long/short	1,150				
Event-driven	497				
Global Macro	990				
Relative Value	2,064				
Opportunistic	153				
Total investment measured at the NAV	 39,056				
Investment derivative instruments (Liabilities)					
Forwards	18	\$	_	\$ 18	\$ _
Options	1		_	1	-
Swaps	8		-	8	-
Total investment derivative instruments	 27	\$	_	\$ 27	\$ _
Total*	\$ 65,781				

(*)Total Investments on the Statement of Fiduciary Net Position agrees to the total sum of \$65,781 on this table, \$4,848 of collateral for loaned securities, and -\$18 of forwards contracts.

A 6 J 20, 2022		Tetel	i M Ider	oted Prices n Active arkets for ntical Assets	Significant Other Dbservable Inputs	Significant nobservable Inputs
As of June 30, 2023 Investments by fair value level (expressed in millions)		Total	(Level 1)	 (Level 2)	 (Level 3)
Debt Securities						
U.S. Government obligations	\$	6,239	\$	6,239	\$ -	\$ -
Domestic corporate obligations		3,659		_	3,659	-
International obligations		932		-	932	-
Emerging markets debt		660		_	660	-
Mortgages & mortgage related securities		1,657		-	-	1,657
Total debt securities		13,147		6,239	5,251	1,657
Equity Securities						
Domestic stocks (includes REITs)		7,324		7,324	-	_
International stocks (includes (REITs)		5,845		5,845	-	-
Total equity securities		13,169		13,169	 -	-
Alternative Investment		433		433	_	-
Total investment by fair value level		26,749	\$	19,841	\$ 5,251	\$ 1,657
Investment measured at the net asset value (NAV))					
Equity Open-End Fund		6,759				
Private funds (includes equity, real estate, credit, energy, infrastructure and timber)		5,372				
Real estate-open ended		20,036				
Multi-asset		234				
Hedge Funds						
Equity long/short		1,196				
Event-driven		407				
Global macro		1,114				
Relative Value		1,766				
Opportunistic		195				
Total investment measured at the NAV		37,079				
Investment derivative instruments and foreign cu	rrency	holdings				
Forwards		(18)	\$	-	\$ (18)	\$ -
Options		(1)		_	(1)	-
Swaps		(1)		_	(1)	_
Total investment derivative instruments		(20)	\$	_	\$ (20)	\$
*Total	\$	63,808				

(*) Total Investments on the Statement of Fiduciary Net Position agrees to the total sum of \$63,808 on this table, \$5,687 of collateral for loaned securities, and \$18 of forwards contracts.

The valuation method for investments measured at net asset value (NAV) per share (or its equivalent) is presented in the following table (in millions):

				As of Jun	e 30, 2024		As of June 30, 2023							
	Fa	ir Value		nfunded 1mitments	Redemption Frequency	Redemption Notice Period	Fa	ir Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period			
Private funds (includes equity, energy, credit, infrastructure, timber, commodity and real estate (1)	\$	22,309	\$	10,491	Illiquid	Illiquid	\$	20.036	\$ 9.817	Illiquid	Illiquid			
Real estate open-end	Ψ	,0 03	Ŷ	10,171		quiu	Ŷ	20,000	φ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Iniquita	Inquita			
fund (3)		4,814			Quarterly	45 - 90 days		5,372		Quarterly	45 - 90 days			
Equity open-end fund (2)		3,662			Daily	1 day		3,633		Daily	1 day			
		2,491			Monthly	5 - 30 days		2,465		Monthly	5 - 30 days			
		668			Triennially	150 days		662		Triennially	150 days			
Multi-asset (9)		258			Monthly	5 days		234		Monthly	5 days			
Hedge Funds														
Equity long/short (5)		914			Monthly	30 - 45 days		808		Monthly	30 - 45 days			
		236			Quarterly	60 days		388		Quarterly	60 days			
Event-driven (6)		110			Quarterly	15 days		104		Quarterly	15 days			
		246			Quarterly	60 - 65 days		172		Quarterly	60 - 65 days			
		11			Quarterly	90 days		17		Quarterly	90 days			
		105			Quarterly	120 days +		81		Quarterly	120 days +			
		25			N/A	Liquidating		33		N/A	Liquidating			
Global macro (4)		305			Monthly	5 - 30 days		275		Monthly	5 - 30 days			
		585			Monthly	60 - 90 days		755		Monthly	60 - 90 days			
		100			Quarterly	60 - 90 days		84		Quarterly	60 - 90 days			
Relative value (7)		161			Monthly	30 days		134		Monthly	30 days			
		209			Monthly	90 days		_		Monthly	90 days			
		542			Ouarterly	30 days		495		Quarterly	30 days			
		1,152			Quarterly	45 - 90 days		1,136		Quarterly	45 - 90 days			
Opportunistic (8)		152			Quarterly	90 days		191		Quarterly	90 days			
fr ··· (*)		1			Semi Annual	90 - 120 days		4		Semi Annual	90 - 120 days			
	\$	39,056	\$	10,491		·	\$	37,079	\$ 9,817		5			

(1) Private funds (includes equity, real estate, credit, energy, infrastructure, commodities, and timber): This type includes 426 Global private funds, which cannot be redeemed. Instead, distributions are received through the liquidation of the underlying assets of the fund. These funds are valued-based on individual audited financial statements and assumptions used by fund managers.

(2) Equity Open-End Fund: This type includes investments in institutional investment funds, which invest in 1 international developing equity, 7 emerging market equities, and 3 domestic equities. The fair values of the funds within this type have been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets. The ten funds have a 5 to 30 days liquidity structures and one fund is redeemable in five months with triennial redemption restrictions.

(3) Real estate-open ended: This type includes 9 domestic open-ended real estate funds, which can be liquidated. The fair values of the funds within this type have been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets.

- (4) Global macro: This category includes 5 hedge funds that invest in over 100 financial markets. The funds are diversified and take long, short and spread positions. The fair values of the funds within this type have been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets. These assets have a liquidity structure which ranges from 5 to 90 days.
- (5) Equity long/short: This type includes investments in 3 hedge funds that invest both long and short primarily in U.S. and Asian common stocks. Management of each hedge fund has the ability to shift investment from value to growth strategies, from small to large capitalization stocks, and from a net long position to a net short position. The fair values of the funds within this type have been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets. One fund has a two-year rolling (hard) lock-up period with custom withdrawal periods on 60 days' notice, while the other requires a 60-day notice for quarterly redemption proceeds. Another fund has a one-year soft lock-up and requires a 30 day to 60-day notice.
- (6) Event-driven: This type includes 5 investments of which 2 are credit hedge funds. These funds invest in equities and bonds of companies and governments at risk of or in the process of reorganizing to profit from economic, political, corporate and government-driven events. The other 3 funds are focused on merger arbitrage and assets across the capital structure. The fair values of the funds within this type have been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets. The funds have a 15 to 90 days liquidity structure.
- (7) Relative value: This category includes 10 hedge funds with a liquidity structure between 30 and 90 days. These funds invest in a wide range of strategies. The fair values of the funds within this type have been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets.
- (8) Opportunistic: Currently there are 3 hedge funds in this category, which invest in re-insurance for catastrophe risk (mostly hurricane and earthquake). The fund has a quarterly redemption with a 90-day. The fair value of these funds has been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets.
- (9) Multi-asset: This category includes 1 diversified fund. The fair value of the fund within this type has been determined using the NAV per share, which has been valued by the fund based on the characteristics of the underlying assets.

4. DERIVATIVES

In conjunction with the responsibility for implementing the Boards asset allocation strategy the Chief Investment Officer hires external investment managers or assigns responsibility to managers employed by the agency. These managers may use derivatives to manage the asset allocation, rebalance the portfolio, equitize cash balances, hedge or manage exposures, or to implement tactical positions. The System invested in swaps, futures, options, forwards, and rights and warrants that are either exchange traded or over-the-counter instruments. Each investment manager's guidelines outline the permissible use of derivatives, which is monitored by internal staff to ensure compliance. The use of derivatives is permitted to the extent that it does not materially alter total portfolio volatility relative to its benchmark and with reference to variance permitted by guideline. The manager is responsible for collateral management and derivatives must be collateralized with cash, cash equivalents, or current portfolio security holdings.

In addition, the System has exposure to derivatives through the ownership interests in commingled funds. These funds may hold derivatives in the fund and the System does not have control over the investment policy or guidelines of such funds. However, the risk associated with derivative instruments is limited to the capital contributed to the fund.

	(in Thousands)			
	Changes in Fair	Value (4)	Fair Value at Jun	e 30, 2024	_
Derivative Instruments	Classification	Amount (1)	Classification	Amount (2)	Notional (3)
Commodity Futures Long	Investment Revenue	\$ 19,053	Futures	\$ -	\$ 8,892.00
Commodity Futures Short	Investment Revenue	(1,114)	Futures	_	-
Credit Default Swaps Written	Investment Revenue	686	Swaps	1,722	51,692
Fixed Income Futures Long	Investment Revenue	(282,990)	Futures	_	4,844,656
Fixed Income Futures Short	Investment Revenue	9,079	Futures	_	(250,843)
Fixed Income Options Bought	Investment Revenue	625	Options	107	150,581
Fixed Income Options Written	Investment Revenue	2,611	Options	(221)	(92,185)
Foreign Currency Futures Short	Investment Revenue	76	Futures	_	(18,000)
Foreign Currency Options Bought	Investment Revenue	319	Options	364	8,000
Foreign Currency Options Written	Investment Revenue	(332)	Options	(362)	(16,000)
Futures Options Bought	Investment Revenue	(939)	Options	8	50
Futures Options Written	Investment Revenue	4,282	Futures	(377)	(167)
FX Forwards	Investment Revenue	19,726	Long Term Instruments	17,811	5,736,248
Index Futures Long	Investment Revenue	271,607	Futures	_	890
Index Futures Short	Investment Revenue	(58,023)	Futures	_	(627)
Index Options Written	Investment Revenue	192	Options	_	_
Pay Fixed Interest Rate Swaps	Investment Revenue	9,303	Swaps	18,108	320,127
Receive Fixed Interest Rate Swaps	Investment Revenue	455	Swaps	(11,816)	453,320
Rights	Investment Revenue	(1,234)	Common Stock	64	67
Warrants	Investment Revenue	_	Common Stock	76	159
		\$ (6,618)		\$ 25,484	

	(in Thousands)				
	Changes in Fair V	Value (4)	Fair Value at Jun	e 30, 2023		
Derivative Instruments	Classification	Amount (1)	Classification	Amount (2)	Notional (3)	
Commodity Futures Long	Investment Revenue	\$ (3,745)	Futures	\$ -	\$ 30,449	
Credit Default Swaps Bought	Investment Revenue	6	Swaps	_	-	
Credit Default Swaps Written	Investment Revenue	5,994	Swaps	2,036	96,573	
Fixed Income Futures Long	Investment Revenue	(259,370)	Futures	_	2,954,515	
Fixed Income Futures Short	Investment Revenue	9,363	Futures	_	(208,892)	
Fixed Income Options Bought	Investment Revenue	491	Options	3,277	13,200	
Fixed Income Options Written	Investment Revenue	5,324	Options	(6,479)	(128,809)	
Foreign Currency Futures Short	Investment Revenue	293	Futures	_	(18,000)	
Foreign Currency Options Written	Investment Revenue	35	Options	_	_	
Futures Options Bought	Investment Revenue	(1)	Options	_	-	
Futures Options Written	Investment Revenue	1,870	Options	(2,049)	(1,026)	
FX Forwards	Investment Revenue	5,633	Long Term Instruments	(18,321)	7,774,463	
Index Futures Long	Investment Revenue	240,684	Futures	_	792	
Index Futures Short	Investment Revenue	(105,355)	Futures	_	(624)	
Pay Fixed Interest Rate Swaps	Investment Revenue	13,390	Swaps	11,582	326,838	
Receive Fixed Interest Rate Swap	Investment Revenue	(23,879)	Swaps	(14,622)	1,022,204	
Rights	Investment Revenue	2,207	Common Stock	26	263	
Warrants	Investment Revenue	(7,578)	Common Stock	_	13	
		\$ (114,638)		\$ (24,550)		

DERIVATIVES (continued)

List of Derivatives Aggregated by Investment Type – At Fair Value as of June 30, 2023

Note: Includes assets invested on behalf of the Mass Transit Administration.

(1) Negative values (in brackets) refer to unrealized losses

(2) Negative values (in brackets) refer to liabilities included in accounts payable and accrued expenses on the Statement of Fiduciary Net Position

(3) Notional may be a dollar amount or size or underlying for futures and options, negative values (in brackets) refer to short positions

(4) Changes in fair value excludes futures margin payments

A. Credit Risk

The use of derivatives exposes the System to credit and counterparty risk due to the risk of counterparties failing to meet the terms of the derivative contracts. To minimize its exposure to losses related to credit and counterparty risk, the external investment managers use counterparty collateral in their non-exchange-traded derivative instruments and monitor the credit worthiness of the counterparties. Netting arrangements are also used when entering into more than one derivative instrument transaction with a counterparty.

The aggregate fair value of derivative instruments with credit exposure at June 30, 2024 and 2023, was \$142,674 and \$171,260 (in thousands), respectively. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform. The maximum loss would, however, be reduced by the counterparty collateral and the liabilities included in netting arrangements with counterparties.

DERIVATIVES (continued)

Counterparty Credit Ratings

The following table lists the counterparty credit ratings of non-exchange traded investment derivative instruments outstanding and may be subject to loss per the ratings issued by S&P Global (S&P), Moody's and Fitch. The aggregate fair value (in thou- sands) of investment derivative instruments subject to counterparty credit risk as of June 30, 2024 and 2023, is shown below:

		S&P			Moody's			Fitch
Fa	ir Value	Rating	F٤	hir Value	Rating	F٤	air Value	Rating
\$	34,682	AA-	\$	33	Aa1	\$	570	AA
	30,640	A+		27,370	Aa2		68,659	AA-
	33,424	А		23,011	Aa3		73,399	A+
	35,252	A-		56,967	A1		40	А
	8,676	BBB+		42	A2		6	A-
	_	NR		35,251	A3		_	BBB+
	_			_	NR		_	NR
\$	142,674	(1)	\$	142,674	(1)	\$	142,674	(1)
				As of June 3	80, 2023			
		S&P			Moody's			Fitch
Fa	ir Value	Rating	F۶	air Value	Rating	F۶	air Value	Rating

		S&P			Moody's			Fitch
Fa	ur Value	Rating	Fa	ir Value	Rating	F٤	air Value	Rating
\$	68,203	AA-	\$	25	Aal	\$	21,677	AA
	39,465	A+		21,435	Aa2		32,986	AA-
	14,063	А		67,278	Aa3		115,804	A+
	41,361	A-		40,456	A1		774	А
	8,168	BBB+		774	A2		19	A-
	-	NR		41,292	A3		_	BBB+
	_			_	NR		_	NR
\$	171,260	(1)	\$	171,260	(1)	\$	171,260	(1)

(1) Total Aggregate Fair Value

Risk Concentrations

The following table lists the counterparty risk concentration and credit ratings per ratings of Standard & Poor's (S&P), Moody's and Fitch as of June 30, 2024:

Counterparty Name	Percentage of Net Exposure	S&P Rating	Fitch Rating	Moody`s Rating
HSBC BANKPLC	24.7%	A-	A+	A3
STATE STREET BANK LONDON	14.5%	А	AA-	A1
WESTPAC BANKING CORPORATION	13.9%	AA-	AA-	Aa2
BNP PARIBAS SA	11.4%	A+	A+	Aa3
THE BANK OF NEW YORK MELLON	8.9%	Α	AA-	A1
ROYAL BANK OF CANADA (UK)	7.9%	AA-	AA-	A1
CITIBANK N.A.	4.7%	A+	A+	Aa3
UBS AG	4.5%	A+	A+	Aa2
WELLS FARGO LCH	4.1%	BBB+	A+	A1
TORONTO DOMINION BANK	2.5%	AA-	AA-	A1
WELLS FARGO CME	1.3%	BBB+	A+	A1
WELLS FARGO ICE	0.7%	BBB+	A+	A1

Risk Concentrations (continued)

	Percentage of			Moody`s
Counterparty Name	Net Exposure	S&P Rating	Fitch Rating	Rating
WELLS FARGO BANK NA	0.4%	A+	AA-	Aa2
JPMORGAN CHASE BANK, N.A.	0.3%	A+	AA	Aa2

The following table lists the counterparty risk concentration and credit ratings per ratings of Standard & Poor's (S&P), Moody's and Fitch as of June 30, 2023:

Counterparty Name	Percentage of Net Exposure	S&P Rating	Fitch Rating	Moody`s Rating
WESTPAC BANKING CORPORATION	24.2%	AA-	A+	Aa3
HSBC BANKPLC	24.1%	A-	A+	A3
ROYAL BANK OF CANADA (UK)	8.6%	AA-	AA-	A1
STATE STREET BANK LONDON	8.2%	А	AA-	A1
JPMORGAN CHASE BANK NA LONDON	8.1%	A+	AA	Aa2
BNP PARIBAS SA	8.0%	A+	A+	Aa3
THE BANK OF NEW YORK MELLON	4.4%	AA-	AA	Aa2
UBS AG	3.7%	A+	A+	Aa3
WELLS FARGO LCH	3.6%	BBB+	A+	A1
CITIBANK N.A.	3.2%	A+	A+	Aa3
TORONTO DOMINION BANK	2.4%	AA-	AA-	A1
WELLS FARGO ICE	0.7%	BBB+	\mathbf{A} +	A1
GOLDMAN SACHS ICE	0.5%	BBB+	Α	A2
STATE STREET BANK AND TRUST COMPANY	0.1%	AA-	AA	Aa3

B. Interest Rate Risk

During fiscal year 2024, the Agency was exposed to interest rate risk. For more details, refer to the Interest Rate Risk Note 3.D. (GASB Statement No. 40).

C. Foreign Currency Risk

The System's derivatives exposed it to foreign currency risk. For more details refer to the Foreign Currency Risk Note 3.F. (GASB Statement No. 40).

5. 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, and beginning July 1, 2014, members of the Judges Retirement System are required to make contributions of 8% of earnable compensation. Members of the Teachers' and Employees' Pension System, Alternate Contributory Pension Selection (ACPS), are required to contribute 7% of earnable compensation.

However, members of the Employees' Pension System who are employed by a participating governmental unit that elected to remain in the Contributory Pension System are required to contribute 2% of earnable compensation. The members of the Employees' Pension System who are employed by participating governmental units who elected to remain in the Non-Contributory Pension System are only 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 Individual 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 fully fund normal costs and amortize the unfunded actuarial accrued liability.

The unfunded actuarial liability was being amortized in distinct layers. The unfunded actuarial accrued liability which existed as of the June 30, 2000, actuarial valuation was being amortized over a 40-year period (as provided by law) from July 1, 1980 and as provided by law, any new unfunded liabilities or surpluses arising during the fiscal year ended June 30, 2001, or any fiscal year thereafter, was being amortized over a 25-year period from the end of the fiscal year in which the liability or surplus arose. However, in the 2014 legislative session, the Legislature changed the method used to fund the System. The unfunded liability for each System is being amortized over a single closed 25-year period.

Members of the State Police Retirement System (SPRS) and Law Enforcement Officers' Pension System (LEOPS) are eligible to participate in a Deferred Retirement Option Program (DROP). For members who enter the DROP on or after July 1, 2011, the member is deemed retired and the retirement allowance is placed in an account earning 4% interest per year, compounded annually. At the end of the DROP period, the lump sum held in the DROP account is paid to the retiree. The SPRS and LEOPS members must end employment and fully retire at the end of the DROP period. The maximum period of participation is 5 years for SPRS and 5 years for LEOPS. The amount of funds held in the DROP as of June 30, 2024 and 2023, was \$40,932,782 and \$34,051,372 respectively.

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 more than 150 participating governmental units make all of the employer and other (non-employer) contributions to the System.

6. 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. 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, 2024 and 2023, refunds to members and withdrawing employers were \$107,308 and \$101,737 (expressed in thousands), respectively.

7. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

For the fiscal years ended June 30, 2024 and 2023 accounts payable and accrued expenses consisted of the following components (expressed in thousands):

	2024		2023
Administrative expenses	\$ 10,890	\$	477
Investment management fees	13,701		12,906
Tax and other withholdings	 46,785	_	44,414
Total	\$ 71,376	\$	57,797

8. NET PENSION LIABILITY

The components of the net pension liability of the participating employers as of June 30, 2024 and 2023, were as follows:

(expressed in thousands)								
		2024		2023				
Total Pension Liability (TPL)	\$	94,214,144	\$	87,923,284				
Plan Fiduciary Net Position		67,909,708		64,892,973				
Net Pension Liability	\$	26,304,436	\$	23,030,311				
Ratio - Fiduciary Net Position/TPL		72.08%		73.81%				

A. Actuarial Assumptions

Inflation	In the 2024 actuarial valuation, 2.5% general, 3% wage.					
	In the 2023 actuarial valuation, 2.25% general, 2.75% wage.					
Salary Increases	In the 2024 actuarial valuation, 3% to 22.5%.					
	In the 2023 actuarial valuation, 2.75% to 11.25%					
Investment Rate of Return	In the 2024 actuarial valuation, 6.80%.					
	In the 2023 actuarial valuation, 6.80%.					
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2024 valuation pursuant to the 2024 experience study for the period July 1, 2018 to June 30, 2023.					
Mortality	Various versions of the Pub-2010 Mortality Tables with projected generational mortality improvements based on the MP-2021 fully generational mortality Improvements scale for males and females.					

B. Investments

The long-term expected rate of return on pension plan investments was determined using a building- block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return were adopted by the Board after considering input from the System's investment consultant(s) and actuary(s).

For each major asset class that is included in the System's target asset allocation as of June 30, 2024 and 2023, these best estimates are summarized in the following table:

	2024			2023	
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Public Equity	34.0%	6.0%	Public Equity	34.0%	6.9%
Private Equity	16.0%	8.5%	Private Equity	16.0%	8.6%
Rate Sensitive	20.0%	2.4%	Rate Sensitive	20.0%	2.6%
Credit Opportunity	9.0%	5.4%	Credit Opportunity	9.0%	5.6%
Real Assets	15.0%	5.5%	Real Assets	15.0%	5.4%
Absolute Return	6.0%	3.9%	Absolute Return	6.0%	4.4%
Total	100.0%	=	Total	100.0%	=

The above was the Board of Trustees' adopted asset allocation policy and best estimate of geometric real rates of return for each major asset class as of June 30, 2024.

For the years ended June 30, 2024 and 2023, the annual money-weighted rate of return on pension plan investments, net of the pension plan investment expense, was 6.89% and 3.11%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

C. Discount Rate

A single discount rate of 6.80% was used to measure the total pension liability as of June 30, 2024 and 2023, respectively. This single discount rate was based on the expected rate of return on pension plan investments of 6.80% as of June 30, 2024 and 2023, respectively. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

D. Sensitivity of the Net Pension Liability

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 6.80%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher as of June 30, 2024:

System	1% Decrease to 5.80%	Discount Rate 6.80%	1% Increase to 7.80%
Teachers	\$ 20,804,414	\$ 13,669,635	\$ 7,735,653
Employees	14,624,477	10,640,348	7,294,195
State Police	1,493,487	1,083,794	750,718
Judges	214,536	137,158	71,138
LEOPS	 1,092,504	 773,501	 512,419
Total System Net Pension Liability	\$ 38,229,418	\$ 26,304,436	\$ 16,364,123

(Expressed in thousands)

The following presents the plan's net pension liability, calculated using a single discount rate of 6.80%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher as of June 30, 2023:

(Expressed in thousands)								
System		1% Decrease to 5.80%		Discount Rate 6.80%		1% Increase to 7.80%		
Teachers	\$	18,552,312	\$	11,886,491	\$	6,366,145		
Employees		13,163,272		9,453,027		6,352,447		
State Police		1,263,348		888,533		585,112		
Judges		177,583		105,463		44,070		
LEOPS		992,774		696,797		455,710		
Total System Net Pension Liability	\$	34,149,289	\$	23,030,311	\$	13,803,484		

MARYLAND STATE RETIREMENT

SCHEDULE OF CHANGES IN

for the Fiscal Year Ended

(Expressed in Thousands)

	1	Teachers' Retirement nd Pension Systems	Employees' Retirement and Pension Systems			State Police Retirement System
Total pension liability						
Service cost	\$	1,088,641	\$	647,073	\$	50,556
Interest		3,430,054		2,072,222		182,813
Changes of benefit terms		_		_		_
Difference between expected and actual experience		1,217,979		1,062,320		175,422
Changes in assumptions		594,822		353,113		39,446
Benefit payments, including refunds of employee						
contributions		(2,849,095)		(1,870,214)		(154,569)
Net change in total pension liability		3,482,401		2,264,514		293,668
Total pension liability, beginning of year		51,307,724		31,075,381		2,739,580
Total pension liability, end of year (a)	\$	54,790,125	\$	33,339,895	\$	3,033,248
Dian fiduaiant not position						
Plan fiduciary net position Contributions - employer	\$	1,272,405	\$	1,099,639	\$	115,333
Contributions - employer Contributions - members	Ф	636,103	Э	385,842	Ф	113,333
Net investment income		2,675,562		1,477,788		126,485
		2,075,502		1,477,788		120,465
Benefit payments, including refunds and administrative expenses		(2,878,851)		(1,890,393)		(154,879)
Net Transfer		(5,962)		4,317		(10 1,075)
Net Change in Plan Fiduciary Net Position		1,699,257		1,077,193		98,407
Plan fiduciary net position - beginning of year		39,421,233		21,622,354		1,851,047
Plan fiduciary net position - end of year (b)	\$	41,120,490	\$	22,699,547	\$	1,949,454
Than inductary net position fond of your (6)	Ψ	11,120,770	Ψ	22,077,047	Ψ	1,777,777
Employer net pension liability (a) - (b)	\$	13,669,635	\$	10,640,348	\$	1,083,794

 Judges' Retirement System	Law Enforcement Officer`s ension System	 Total
\$ 24,099	\$ 66,836	\$ 1,877,205
46,210	142,261	5,873,560
68	_	68
25,935	77,362	2,559,018
5,429	11,932	1,004,742
(46,086)	(103,769)	(5,023,733)
 55,655	 194,622	6,290,860
690,371	2,110,228	87,923,284
\$ 746,026	\$ 2,304,850	\$ 94,214,144
\$ 26,085	\$ 104,854	\$ 2,618,316
4,255	18,580	1,056,173
39,813	97,127	4,416,775
(46,162)	(104,244)	(5,074,529)
(31)	1,601	_
 23,960	117,918	 3,016,735
584,908	1,413,431	64,892,973
\$ 608,868	\$ 1,531,349	\$ 67,909,708
\$ 137,158	\$ 773,501	\$ 26,304,436

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

IEDULE OF CHANGES IN

for the Fiscal Year Ended

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems		State Police Retirement System
Total pension liability					
Service cost	\$	1,019,621	\$	586,870	\$ 48,894
Interest		3,291,757		1,991,421	173,872
Changes of benefit terms		-		_	(2,475)
Difference between expected and actual experience		462,643		399,337	59,413
Changes in assumptions		-		_	_
Benefit payments, including refunds of employee contributions		(2,701,693)		(1,769,402)	 (143,691)
Net change in total pension liability		2,072,328		1,208,226	136,013
Total pension liability, beginning of year		49,235,396		29,867,155	 2,603,567
Total pension liability, end of year (a)	\$	51,307,724	\$	31,075,381	\$ 2,739,580
Plan fiduciary net position					
Contributions - employer	\$	1,228,568	\$	985,126	\$ 106,966
Contributions - members		588,395		343,720	10,776
Net investment income		1,204,663		658,279	56,353
Benefit payments, including refunds and administrative expenses		(2,727,551)		(1,788,454)	(144,017)
Net Transfer		978		(5,051)	206
Net Change in Plan Fiduciary Net Position		295,053		193,620	 30,284
Plan fiduciary net position - beginning of year		39,126,180		21,428,734	1,820,763
Plan fiduciary net position - end of year (b)	\$	39,421,233	\$	21,622,354	\$ 1,851,047
Employer net pension liability (a) - (b)	\$	11,886,491	\$	9,453,027	\$ 888,533

	Judges' Retirement System	Law Enforcement Officer`s ension System		Total
\$	23,026	\$ 60,798	\$	1,739,209
•	43,224	132,606	•	5,632,880
	_	(2,634)		(5,109)
	21,695	48,593		991,681
	_	_		_
	(43,076)	(97,038)		(4,754,900)
	44,869	 142,325		3,603,761
	645,502	1,967,903		84,319,523
\$	690,371	\$ 2,110,228	\$	87,923,284
\$	23,675	\$ 94,582	\$	2,438,917
	3,947	16,864		963,702
	17,901	43,081		1,980,277
	(43,152)	(97,740)		(4,800,914)
	(5)	 3,871		(1)
	2,366	60,658		581,981
	582,542	1,352,773		64,310,992
\$	584,908	\$ 1,413,431	\$	64,892,973
\$	105,463	\$ 696,797	\$	23,030,311

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended (Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems		State Police Retirement System	
Total pension liability						
Service cost	\$	964,482	\$	521,702	\$	43,951
Interest		3,221,143		1,961,621		169,184
Changes of benefit terms		_		-		-
Difference between expected and actual experience		(549,388)		(357,873)		(6,649)
Changes in assumptions		_		_		_
Benefit payments, including refunds of employee contributions		(2,550,604)		(1,670,739)		(136,375)
Net change in total pension liability		1,085,633		454,711		70,111
Total pension liability, beginning of year		48,149,763		29,412,444		2,533,456
Total pension liability, end of year (a)	\$	49,235,396	\$	29,867,155	\$	2,603,567
Plan fiduciary net position						
Contributions - employer	\$	1,202,102	\$	880,672	\$	95,453
Contributions - members		554,537		311,851		9,843
Net investment income		(1,179,567)		(648,324)		(55,120)
Benefit payments, including refunds and						
administrative expenses		(2,574,104)		(1,688,310)		(136,676)
Net Transfer		2,431		(4,643)		36
Net Change in Plan Fiduciary Net Position		(1,994,601)		(1,148,754)		(86,464)
Plan fiduciary net position - beginning of year		41,120,781		22,577,488		1,907,227
Plan fiduciary net position - end of year (b)	\$	39,126,180	\$	21,428,734	\$	1,820,763
Employer net pension liability (a) - (b)	\$	10,109,216	\$	8,438,421	\$	782,804

 Judges' Retirement System	Law Enforcement Officer`s ension System	 Total
\$ 21,094	\$ 53,741	\$ 1,604,970
42,059	126,915	5,520,922
_	_	_
(5,498)	(7,880)	(927,288)
-	_	_
(39,934)	(88,234)	(4,485,886)
 17,721	 84,542	 1,712,718
,	2	, ,
627,781	1,883,361	82,606,805
\$ 645,502	\$ 1,967,903	\$ 84,319,523
\$ 22,816	\$ 81,260	\$ 2,282,303
3,643	14,393	894,267
(17,502)	(41,620)	(1,942,133)
(40,004)	(88,852)	(4,527,946)
(71)	2,247	_
 (31,118)	 (32,572)	 (3,293,509)
613,660	1,385,345	67,604,501
\$ 582,542	\$ 1,352,773	\$ 64,310,992
\$ 62,960	\$ 615,130	\$ 20,008,531

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended (Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems		State Police Retirement System
Total pension liability					
Service cost	\$	858,844	\$	467,800	\$ 38,774
Interest		3,270,336		1,996,318	172,521
Changes of benefit terms		_		_	_
Difference between expected and actual experience		(563,443)		(183,991)	(17,273)
Changes in assumptions		2,065,188		1,199,460	96,021
Benefit payments, including refunds of employee contributions		(2,462,312)		(1,600,822)	(135,414)
Net change in total pension liability		3,168,613		1,878,765	 154,629
Total pension liability, beginning of year		44,981,150		27,533,679	2,378,827
Total pension liability, end of year (a)	\$	48,149,763	\$	29,412,444	\$ 2,533,456
Plan fiduciary net position					
Contributions - employer	\$	1,153,208	\$	856,219	\$ 93,651
Contributions - members		531,931		307,068	9,432
Net investment income		8,699,680		4,795,405	403,734
Benefit payments, including refunds and					
administrative expenses		(2,485,957)		(1,624,910)	(135,711)
Net Transfer		6,907		(7,126)	
Net Change in Plan Fiduciary Net Position		7,905,769		4,326,656	371,106
Plan fiduciary net position - beginning of year		33,215,012		18,250,832	1,536,121
Plan fiduciary net position - end of year (b)	\$	41,120,781	\$	22,577,488	\$ 1,907,227
Employer net pension liability (a) - (b)	\$	7,028,982	\$	6,834,956	\$ 626,229

 Judges' Retirement System	Law Enforcement Officer`s ension System	 Total
\$ 19,538	\$ 46,320	\$ 1,431,276
42,566	125,229	5,606,970
_	_	_
5,450	(10,113)	(769,370)
13,876	93,808	3,468,353
(37,874)	(81,399)	(4,317,821)
 43,556	 173,845	 5,419,408
 584,225	 1,709,516	 77,187,397
\$ 627,781	\$ 1,883,361	\$ 82,606,805
\$ 21,277	\$ 79,168	\$ 2,203,523
3,595	13,714	865,740
129,884	287,059	14,315,762
(37,944)	(82,039)	(4,366,561)
_	219	_
116,812	 298,121	 13,018,464
 496,848	 1,087,224	54,586,037
\$ 613,660	\$ 1,385,345	\$ 67,604,501
\$ 14,121	\$ 498,016	\$ 15,002,304

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended (Expressed in Thousands)

	Teachers' Retirement and Pension Systems			Employees' Retirement and Pension Systems	State Police Retirement System	
Total pension liability						
Service cost	\$	848,894	\$	469,984	\$	38,359
Interest		3,162,069		1,930,920		165,786
Changes of benefit terms		_		_		(50)
Difference between expected and actual experience		(125,435)		54,646		18,073
Changes in assumptions		_		_		_
Benefit payments, including refunds of employee						
contributions		(2,393,609)		(1,541,672)		(127,446)
Net change in total pension liability		1,491,919		913,878		94,722
Total pension liability, beginning of year		43,489,231		26,619,801		2,284,105
Total pension liability, end of year (a)	\$	44,981,150	\$	27,533,679	\$	2,378,827
Plan fiduciary net position						
Contributions - employer	\$	1,170,248	\$	788,853	\$	91,390
Contributions - members		499,884		324,162		9,277
Net investment income		1,133,679		627,106		52,800
Benefit payments, including refunds and						
administrative expenses		(2,416,468)		(1,559,154)		(127,736)
Net Transfer		24,744		(25,535)		62
Net Change in Plan Fiduciary Net Position		412,087		155,432		25,793
Plan fiduciary net position - beginning of year		32,802,925		18,095,400		1,510,328
Plan fiduciary net position - end of year (b)	\$	33,215,012	\$	18,250,832	\$	1,536,121
Employer net pension liability (a) - (b)	\$	11,766,138	\$	9,282,847	\$	842,706

	Judges' Retirement System		Law Enforcement Officer`s ension System		Total
\$	19,399	\$	45,684	\$	1,422,320
*	41,066	*	118,154	+	5,417,995
			(45)		(95)
	(3,166)		11,274		(44,608)
			_		_
	(36,332)		(78,186)		(4,177,245)
	20,967		96,881		2,618,367
	563,258		1,612,635		74,569,030
\$	584,225	\$	1,709,516	\$	77,187,397
\$	22,708	\$	71,070	\$	2,144,269
	3,453		13,522		850,298
	17,071		35,985		1,866,641
	(36,401)		(78,830)		(4,218,589)
	_		728		(1)
	6,831		42,475		642,618
	490,017		1,044,749		53,943,419
\$	496,848	\$	1,087,224	\$	54,586,037
_					
\$	87,377	\$	622,292	\$	22,601,360

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended (Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems		State Police Retirement System	
Total pension liability						
Service cost	\$	814,019	\$	451,990	\$	34,276
Interest		3,143,018		1,864,909		165,837
Changes of benefit terms		_		—		_
Difference between expected and actual experience		(189,803)		(44,635)		(19,980)
Changes in assumptions		(897,464)		283,109		(42,874)
Benefit payments, including refunds of employee contributions		(2,296,744)		(1,465,626)		(122,447)
Net change in total pension liability		573,026		1,089,747		14,812
Total pension liability, beginning of year		42,916,205		25,530,054		2,269,293
Total pension liability, end of year (a)	\$	43,489,231	\$	26,619,801	\$	2,284,105
Plan fiduciary net position						
Contributions - employer	\$	1,143,586	\$	737,284	\$	86,172
Contributions - members		494,697		288,350		8,579
Net investment income		1,999,259		1,103,927		91,778
Benefit payments, including refunds and						
administrative expenses		(2,318,939)		(1,482,270)		(122,721)
Net Transfer		3,870		(4,830)		(28)
Net Change in Plan Fiduciary Net Position		1,322,473		642,461		63,780
Plan fiduciary net position - beginning of year		31,480,452		17,452,939		1,446,548
Plan fiduciary net position - end of year (b)	\$	32,802,925	\$	18,095,400	\$	1,510,328
Employer net pension liability (a) - (b)	\$	10,686,306	\$	8,524,401	\$	773,777

 Judges' Retirement System	Law Enforcement Officer`s ension System		Total
\$ 19,173	\$ 39,302	\$	1,358,760
41,302	112,806		5,327,872
_	_		_
(5,570)	8,400		(251,588)
(19,037)	(4,959)		(681,225)
(34,540)	(74,265)		(3,993,622)
 1,328	 81,284		1,760,197
561,930	1,531,351		72,808,833
\$ 563,258	\$ 1,612,635	\$	74,569,030
\$ 21,737	\$ 65,314	\$	2,054,093
3,176	12,488		807,290
29,689	63,554		3,288,207
(34,604)	(74,870)		(4,033,404)
_	988		_
 19,998	67,474		2,116,186
470,019	977,275		51,827,233
\$ 490,017	\$ 1,044,749	\$	53,943,419
 	 	÷	
\$ 73,241	\$ 567,886	\$	20,625,611

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended (Expressed in Thousands)

	1	Teachers' Retirement and Pension Systems	Employees' Retirement and Pension Systems			State Police Retirement System	
Total pension liability							
Service cost	\$	791,979	\$	441,284	\$	32,285	
Interest		3,070,454		1,824,968		161,440	
Changes of benefit terms		_		_		(2,167)	
Difference between expected and actual experience		(466,863)		(204,581)		1,513	
Changes in assumptions		92,669		55,131		2,013	
Benefit payments, including refunds of employee contributions		(2, 205, 210)		(1 201 042)		(122 720)	
		(2,205,310)		(1,381,043)		(122,720)	
Net change in total pension liability		1,282,929		735,759		72,364	
Total pension liability, beginning of year		41,633,276		24,794,295		2,196,929	
Total pension liability, end of year (a)	\$	42,916,205	\$	25,530,054	\$	2,269,293	
Plan fiduciary net position							
Contributions - employer	\$	1,122,986	\$	707,194	\$	80,241	
Contributions - members		484,923		283,670		8,063	
Net investment income		2,364,521		1,318,438		109,405	
Benefit payments, including refunds and							
administrative expenses		(2,223,399)		(1,395,375)		(122,963)	
Net Transfer		229		(1,653)		21	
Net Change in Plan Fiduciary Net Position		1,749,260		912,274		74,767	
Plan fiduciary net position - beginning of year		29,731,192		16,540,665		1,371,781	
Plan fiduciary net position - end of year (b)	\$	31,480,452	\$	17,452,939	\$	1,446,548	
Employer net pension liability (a) - (b)	\$	11,435,753	\$	8,077,115	\$	822,745	

 Judges' Retirement System	Law Enforcement Officer`s ension System	 Total
\$ 18,482	\$ 36,988	\$ 1,321,018
40,740	106,465	5,204,067
_	4,566	2,399
(14,982)	13,780	(671,133)
(139)	4,655	154,329
(32,009)	(71,650)	(3,812,732)
 12,092	 94,804	2,197,948
549,838	1,436,547	70,610,885
\$ 561,930	\$ 1,531,351	\$ 72,808,833
\$ 22,465	\$ 62,131	\$ 1,995,017
3,071	11,855	791,582
35,195	71,834	3,899,393
(32,063)	(72,143)	(3,845,943)
_	1,403	_
 28,668	75,080	 2,840,049
441,351	902,195	48,987,184
\$ 470,019	\$ 977,275	\$ 51,827,233
\$ 91,911	\$ 554,076	\$ 20,981,600

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended (Expressed in Thousands)

		Teachers' Retirement Ind Pension Systems	Employees' Retirement and Pension Systems			State Police Retirement System	
Total pension liability							
Service cost	\$	777,084	\$	444,566	\$	32,324	
Interest		3,010,496		1,806,261		160,396	
Changes of benefit terms		_		_		_	
Difference between expected and actual experience		(644,543)		(545,442)		(45,314)	
Changes in assumptions		76,937		47,996		1,438	
Benefit payments, including refunds of employee contributions		(2,120,119)		(1,305,891)		(118,833)	
Net change in total pension liability		1,099,855		447,490		30,011	
Total pension liability, beginning of year		40,533,421		24,346,805		2,166,918	
Total pension liability, end of year (a)	\$	41,633,276	\$	24,794,295	\$	2,196,929	
Plan fiduciary net position							
Contributions - employer	\$	1,137,472	\$	730,506	\$	83,000	
Contributions - members		477,194		282,742		7,996	
Net investment income		2,710,602		1,516,095		125,128	
Benefit payments, including refunds and							
administrative expenses		(2,136,132)		(1,319,014)		(118,531)	
Net Transfer		(157)		(1,117)		56	
Net Change in Plan Fiduciary Net Position		2,188,979		1,209,212		97,649	
Plan fiduciary net position - beginning of year		27,542,213		15,331,453		1,274,132	
Plan fiduciary net position - end of year (b)	\$	29,731,192	\$	16,540,665	\$	1,371,781	
Employer net pension liability (a) - (b)	\$	11,902,084	\$	8,253,630	\$	825,148	

 Judges' Retirement System		Law Enforcement Officer`s ension System	 Total
\$ 18,225	\$	36,059	\$ 1,308,258
40,009		102,873	5,120,035
_		_	_
(13,325)		(18,348)	(1,266,972)
(136)		3,940	130,175
(31,253)		(64,468)	(3,640,564)
 13,520		60,056	1,650,932
536,318		1,376,491	68,959,953
\$ 549,838	\$	1,436,547	\$ 70,610,885
21,861		60,473	2,033,312
3,004		11,753	782,689
40,128		81,490	4,473,443
(31,302)		(63,207)	(3,668,186)
(2)		1,220	_
 33,689		91,729	3,621,258
407,662		810,466	45,365,926
\$ 441,351	\$		\$ 48,987,184
	_		
\$ 108,487	\$	534,352	\$ 21,623,701

MARYLAND STATE RETIREMENT

SCHEDULE OF CHANGES IN

for the Fiscal Year Ended (*Expressed in Thousands*)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems		State Police Retirement System
Total pension liability					
Service cost	\$	763,578	\$	439,705	\$ 30,309
Interest		2,914,637		1,737,109	155,993
Changes of benefit terms		_		_	_
Difference between expected and actual experience		(327,577)		16,870	(8,573)
Changes in assumptions		_		_	_
Benefit payments, including refunds of employee contributions		(2,056,256)		(1,255,358)	(121,917)
Net change in total pension liability		1,294,382		938,326	 55,812
Total pension liability, beginning of year		39,239,039		23,408,479	2,111,106
Total pension liability, end of year (a)	\$	40,533,421	\$	24,346,805	\$ 2,166,918
Plan fiduciary net position					
Contributions - employer	\$	1,084,049	\$	640,943	\$ 72,320
Contributions - members		464,470		278,944	7,251
Net investment income		301,774		168,775	13,806
Benefit payments, including refunds and administrative expenses		(2,071,845)		(1,267,809)	(122,123)
Net Transfer		(163)		(191)	41
Net Change in Plan Fiduciary Net Position		(221,715)		(179,338)	 (28,705)
Plan fiduciary net position - beginning of year		27,763,928		15,510,791	1,302,837
Plan fiduciary net position - end of year (b)	\$	27,542,213	\$	15,331,453	\$ 1,274,132
Employer net pension liability (a) - (b)	\$	12,991,208	\$	9,015,352	\$ 892,786

 Judges' Retirement System	Law Enforcement Officer`s nsion System	 Total
\$ 17,295	\$ 34,001	\$ 1,284,888
37,910	97,371	4,943,020
_	_	_
2,999	4,629	(311,652)
-	-	_
(30,487)	(63,837)	(3,527,855)
 27,717	72,164	2,388,401
508,601	1,304,327	66,571,552
\$ 536,318	\$ 1,376,491	\$ 68,959,953
\$ 18,384	\$ 54,959	\$ 1,870,655
2,863	10,886	764,414
4,415	8,761	497,531
(30,532)	(64,205)	(3,556,514)
_	313	_
 (4,870)	 10,714	 (423,914)
412,532	799,752	45,789,840
\$ 407,662	\$	\$ 45,365,926
\$ 128,656	\$ 566,025	\$ 23,594,027

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended

(Expressed in Thousands)

	l	Teachers' Retirement nd Pension Systems	Employees' Retirement and Pension Systems		State Police Retirement System
Total pension liability					
Service cost	\$	783,603	\$	461,524	\$ 30,556
Interest		2,811,261		1,663,866	147,839
Changes of benefit terms		_		_	_
Difference between expected and actual experience		(476,190)		(19,591)	(10,512)
Changes in assumptions		753,521		375,148	86,689
Benefit payments, including refunds of employee contributions		(1,958,092)		(1,170,116)	(119,804)
Net change in total pension liability		1,914,103		1,310,831	 134,768
Total pension liability, beginning of year		37,324,936		22,097,648	1,976,338
Total pension liability, end of year (a)	\$	39,239,039	\$	23,408,479	\$ 2,111,106
Plan fiduciary net position					
Contributions - employer	\$	1,063,763	\$	643,219	\$ 76,056
Contributions - members		454,770		280,133	7,205
Net investment income		727,858		405,846	33,035
Benefit payments, including refunds and administrative expenses		(1,973,827)		(1,182,886)	(120,006)
Net Transfer		(1,975,827) 309		(1,182,880)	(120,000)
Net Change in Plan Fiduciary Net Position		272,873		145,777	 (3,710)
Plan fiduciary net position - beginning of year		27,491,055		15,365,014	1,306,547
Plan fiduciary net position - end of year (b)	\$		\$	15,510,791	\$ 1,302,837
Employer net pension liability (a) - (b)	\$	11,475,111	\$	7,897,688	\$ 808,269

AND PENSION SYSTEM EMPLOYERS' NET PENSION LIABILITY

June 30, 2015

]	Judges' Retirement System	Law Enforcement Officer`s ension System	 Total
\$	16,306	\$ 33,934	\$ 1,325,923
	34,735	93,085	4,750,786
	_	_	—
	(843)	(5,846)	(512,982)
	27,072	11,471	1,253,901
	(28,899)	(55,884)	(3,332,795)
	48,371	 76,760	3,484,833
	460,230	1,227,567	63,086,719
\$	508,601	\$ 1,304,327	\$ 66,571,552
\$	19,028	\$ 56,546	\$ 1,858,612
	2,813	10,523	755,444
	10,759	20,173	1,197,671
	(28,945)	(56,211)	(3,361,875)
	(6)	232	-
	3,649	 31,263	 449,852
	408,883	768,489	45,339,988
\$	412,532	\$ 799,752	\$ 45,789,840
\$	96,069	\$ 504,575	\$ 20,781,712

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2024

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems	~	State Police Retirement System	I	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Total pension liability	\$ 54,790,125	\$	33,339,895	\$	3,033,248	\$	746,026	\$	2,304,850	\$ 94,214,144
Plan fiduciary net position	 (41,120,490)		(22,699,547)		(1,949,454)		(608,868)		(1,531,349)	 (67,909,708)
Employer net pension liability	\$ 13,669,635	\$	10,640,348	\$	1,083,794	\$	137,158	\$	773,501	\$ 26,304,436
Plan fiduciary net position as a percentage of the total pension liability	75.05%		68.09%		64.27%		81.61%		66.44%	72.08%
Covered payroll	\$ 9,102,349	\$	6,074,382	\$	145,026	\$	61,181	\$	267,415	\$ 15,650,353
Employer net pension liability as a percent of covered payroll	150.18%		175.17%		747.31%		224.18%		289.25%	168.08%

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2023

	Teachers' Retirement and Pension Systems	Employees' Retirement and Pension Systems	~	State Police Retirement System]	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Total pension liability	\$ 51,307,724	\$ 31,075,381	\$	2,739,580	\$	690,371	\$	2,110,228	\$ 87,923,284
Plan fiduciary net position	 (39,421,233)	 (21,622,354)		(1,851,047)		(584,908)		(1,413,431)	 (64,892,973)
Employer net pension liability	\$ 11,886,491	\$ 9,453,027	\$	888,533	\$	105,463	\$	696,797	\$ 23,030,311
Plan fiduciary net position as a percentage of the total pension liability	 76.83%	 69.58%		67.57%		84.72%		66.98%	 73.81%
Covered payroll	\$ 8,468,612	\$ 5,475,886	\$	139,458	\$	58,696	\$	241,937	\$ 14,384,589
Employer net pension liability as a percent of covered payroll	140.36%	172.63%		637.13%		179.68%		288.01%	160.10%

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SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2022

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems		State Police Retirement System	ŀ	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Total pension liability	\$ 49,235,396	\$	29,867,155	\$	2,603,567	\$	645,502	\$	1,967,903	\$ 84,319,523
Plan fiduciary net position	 (39,126,180)		(21,428,734)	_	(1,820,763)	_	(582,542)		(1,352,773)	 (64,310,992)
Employer net pension liability	\$ 10,109,216	\$	8,438,421	\$	782,804	\$	62,960	\$	615,130	\$ 20,008,531
Plan fiduciary net position as a percentage of the total pension liability	79.47%		71.75%		69.93%		90.25%		68.74%	76.27%
Covered payroll	\$ 7,957,775	\$	4,852,737	\$	124,367	\$	53,934	\$	213,003	\$ 13,201,816
Employer net pension liability as a percent of covered payroll	127.04%		173.89%		629.43%		116.74%		288.79%	151.56%

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2021

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems	State Police Retirement System	1	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Total pension liability	\$ 48,149,763	\$	29,412,444	\$ 2,533,456	\$	627,781	\$	1,883,361	\$ 82,606,805
Plan fiduciary net position	 (41,120,781)		(22,577,488)	 (1,907,227)		(613,660)		(1,385,345)	 (67,604,501)
Employer net pension liability	\$ 7,028,982	\$	6,834,956	\$ 626,229	\$	14,121	\$	498,016	\$ 15,002,304
Plan fiduciary net position as a percentage of the total pension liability	 85.40%		76.76%	75.28%		97.75%		73.56%	81.84%
Covered payroll	\$ 7,688,846	\$	4,689,819	\$ 119,048	\$	52,073	\$	199,460	\$ 12,749,246
Employer net pension liability as a percent of covered payroll	91.42%		145.74%	526.03%		27.12%		249.68%	117.67%

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2020

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems	State Police Retirement System]	Judges' Retirement System	Е	Law nforcement Officer`s Pension System	Total
Total pension liability	\$	44,981,150	\$ 27,533,679	\$ 2,378,827	\$	584,225	\$	1,709,516	\$ 77,187,397
Plan fiduciary net position		(33,215,012)	 (18,250,832)	 (1,536,121)		(496,848)		(1,087,224)	 (54,586,037)
Employer net pension liability	\$	11,766,138	\$ 9,282,847	\$ 842,706	\$	87,377	\$	622,292	\$ 22,601,360
Plan fiduciary net position as a percentage of the total pension liability		73.84%	 66.29%	64.57%		85.04%		63.60%	 70.72%
Covered payroll	\$	7,492,465	\$ 4,646,134	\$ 116,274	\$	51,882	\$	194,667	\$ 12,501,422
Employer net pension liability as a percent of covered payroll		157.04%	199.80%	724.76%		168.41%		319.67%	180.79%

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2019

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems	~~	State Police Retirement System	I	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Total pension liability	\$	43,489,231	\$ 26,619,801	\$	2,284,105	\$	563,258	\$	1,612,635	\$ 74,569,030
Plan fiduciary net position		(32,802,925)	 (18,095,400)		(1,510,328)		(490,017)		(1,044,749)	 (53,943,419)
Employer net pension liability	\$	10,686,306	\$ 8,524,401	\$	773,777	\$	73,241	\$	567,886	\$ 20,625,611
Plan fiduciary net position as a percentage of the total pension liability		75.43%	 67.98%		66.12%		87.00%		64.79%	72.34%
Covered payroll	\$	7,153,063	\$ 4,415,523	\$	106,978	\$	48,935	\$	180,964	\$ 11,905,463
Employer net pension liability as a percent of covered payroll		149.39%	193.06%		723.30%		149.67%		313.81%	173.24%

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SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2018

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems	State Police Retirement System]	Judges' Retirement System	 Law nforcement Officer`s Pension System	Total
Total pension liability	\$ 42,916,205	\$	25,530,054	\$ 2,269,293	\$	561,930	\$ 1,531,351	\$ 72,808,833
Plan fiduciary net position	 (31,480,452)		(17,452,939)	 (1,446,548)		(470,019)	 (977,275)	 (51,827,233)
Employer net pension liability	\$ 11,435,753	\$	8,077,115	\$ 822,745	\$	91,911	\$ 554,076	\$ 20,981,600
Plan fiduciary net position as a percentage of the total pension liability	 73.35%		68.36%	63.74%		83.64%	 63.82%	71.18%
Covered payroll	\$ 6,941,097	\$	4,306,746	\$ 100,325	\$	47,498	\$ 170,556	\$ 11,566,222
Employer net pension liability as a percent of covered payroll	164.75%		187.55%	820.08%		193.50%	324.86%	181.40%

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2017

	Teachers' Retirement and Pension Systems	Employees' Retirement and Pension Systems	State Police Retirement System	1	Judges' Retirement System	Law nforcement Officer`s Pension System	Total
Total pension liability	\$ 41,633,276	\$ 24,794,295	\$ 2,196,929	\$	549,838	\$ 1,436,547	\$ 70,610,885
Plan fiduciary net position	 (29,731,192)	 (16,540,665)	 (1,371,781)		(441,351)	 (902,195)	 (48,987,184)
Employer net pension liability	\$ 11,902,084	\$ 8,253,630	\$ 825,148	\$	108,487	\$ 534,352	\$ 21,623,701
Plan fiduciary net position as a percentage of the total pension liability	 71.41%	66.71%	62.44%		80.27%	 62.80%	69.38%
Covered payroll	\$ 6,780,838	\$ 4,324,315	\$ 100,384	\$	46,876	\$ 166,561	\$ 11,418,974
Employer net pension liability as a percent of covered payroll	175.53%	190.87%	821.99%		231.43%	320.81%	189.37%

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2016

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems	State Police Retirement System]	Judges' Retirement System	Е	Law nforcement Officer`s Pension System	Total
Total pension liability	\$	40,533,421	\$ 24,346,805	\$ 2,166,918	\$	536,318	\$	1,376,491	\$ 68,959,953
Plan fiduciary net position		(27,542,213)	 (15,331,453)	 (1,274,132)		(407,662)		(810,466)	 (45,365,926)
Employer net pension liability	\$	12,991,208	\$ 9,015,352	\$ 892,786	\$	128,656	\$	566,025	\$ 23,594,027
Plan fiduciary net position as a percentage of the total pension liability		67.95%	62.97%	 58.80%		76.01%		58.88%	65.79%
Covered payroll	\$	6,611,038	\$ 4,250,288	\$ 93,491	\$	44,711	\$	156,396	\$ 11,155,924
Employer net pension liability as a percent of covered payroll		196.51%	212.11%	954.94%		287.75%		361.92%	211.49%

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2015

	Teachers' Retirement and Pension Systems		Employees' Retirement and Pension Systems	~	State Police Retirement System	F	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Total pension liability	\$ 39,239,039	\$	23,408,479	\$	2,111,106	\$	508,601	\$	1,304,327	\$ 66,571,552
Plan fiduciary net position	 (27,763,928)		(15,510,791)		(1,302,837)		(412,532)		(799,752)	 (45,789,840)
Employer net pension liability	\$ 11,475,111	\$	7,897,688	\$	808,269	\$	96,069	\$	504,575	\$ 20,781,712
Plan fiduciary net position as a percentage of the total pension liability	 70.76%		66.26%		61.71%		81.11%		61.32%	 68.78%
Covered payroll	\$ 6,470,706	\$	4,305,637	\$	91,050	\$	44,613	\$	151,955	\$ 11,063,961
Employer net pension liability as a percent of covered payroll	177.34%		183.43%		887.72%		215.34%		332.06%	187.83%

for the Fiscal Year Ended June 30, 2024

(Expressed in Thousands)

	F a	Teachers' Retirement nd Pension Systems	Employees' Retirement and Pension Systems	~~	State Police Retirement System	1	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution	\$	1,272,405	\$ 1,099,639	\$	115,333	\$	26,085	\$	104,854	\$ 2,618,316
Actual contribution		(1,272,405)	 (1,099,639)		(115,333)		(26,085)		(104,854)	 (2,618,316)
Contribution deficiency	\$	_	\$ _	\$	_	\$	-	\$	-	\$ _
Covered payroll	\$	9,102,349	\$ 6,074,382	\$	145,026	\$	61,181	\$	267,415	\$ 15,650,353
Actual contribution as a percent of covered payroll		13.98%	18.10%		79.53%		42.64%		39.21%	16.73%

SCHEDULE OF EMPLOYERS' CONTRIBUTIONS AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2023

(Expressed in Thousands)

	F	Teachers' Retirement nd Pension Systems]	Employees' Retirement Ind Pension Systems		tate Police etirement System	R	Judges' Retirement System	F	Law Enforcement Officer`s Pension System		Total
Actuarially determined contribution	\$	1,228,568	\$	985,126	\$	106,966	\$	- ,	\$	94,582	\$	2,438,917
Actual contribution		(1,228,568)		(985,126)	_	(106,966)	_	(23,675)		(94,582)	_	(2,438,917)
Contribution deficiency	\$	_	\$	_	\$	_	\$	-	\$	_	\$	_
Covered payroll	\$	8,468,612	\$	5,475,886	\$	139,458	\$	58,696	\$	241,937	\$	14,384,589
Actual contribution as a percent of covered payroll		14.51%		17.99%		76.70%		40.33%		39.09%		16.96%

SCHEDULE OF EMPLOYERS' CONTRIBUTIONS AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2022

	R	Feachers' Retirement nd Pension Systems	I	Employees' Retirement nd Pension Systems	tate Police Retirement System	F	Judges' Retirement System	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution Actual contribution	\$	1,202,102	\$	880,672 (880,672)	\$ 95,453 (95,453)	\$	22,816 (22,816)	\$ 81,260 (81,260)	\$ 2,282,303 (2,282,303)
Contribution deficiency	\$	(1,202,102)	\$	-	\$ 	\$	(22,010)	\$ (01,200)	\$ (2,202,303)
Covered payroll	\$	7,957,775	\$	4,852,737	\$ 124,367	\$	53,934	\$ 213,003	\$ 13,201,816
Actual contribution as a percent of covered payroll		15.11%		18.15%	76.75%		42.30%	38.15%	17.29%

for the Fiscal Year Ended June 30, 2021

(Expressed in Thousands)

	R	Feachers' Retirement nd Pension Systems]	Employees' Retirement Ind Pension Systems	 tate Police Retirement System]	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution	\$	1,153,208	\$	856,219	\$ 93,651	\$	21,277	\$	79,168	\$ 2,203,523
Actual contribution		(1,153,208)		(856,219)	 (93,651)		(21,277)		(79,168)	 (2,203,523)
Contribution deficiency	\$	_	\$	_	\$ _	\$	_	\$	_	 _
Covered payroll	\$	7,688,846	\$	4,689,819	\$ 119,048	\$	52,073	\$	199,460	\$ 12,749,246
Actual contribution as a percent of covered payroll		15.00%		18.26%	78.67%		40.86%		39.69%	17.28%

SCHEDULE OF EMPLOYERS' CONTRIBUTIONS AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2020

(Expressed in Thousands)

	F	Feachers' Retirement nd Pension Systems]	Employees' Retirement and Pension Systems	 tate Police Retirement System	F	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution Actual contribution	\$	1,170,248 (1,170,248)	\$	788,853 (788,853)	\$ 91,390 (91,390)	\$	22,708 (22,708)	\$	71,070 (71,070)	\$ 2,144,269 (2,144,269)
Contribution deficiency	\$	-	\$	-	\$ -	\$	-	\$	-	\$ -
Covered payroll	\$	7,492,465	\$	4,646,134	\$ 116,274	\$	51,882	\$	194,667	\$ 12,501,422
Actual contribution as a percent of covered payroll		15.62%		16.98%	78.60%		43.77%		36.51%	17.15%

SCHEDULE OF EMPLOYERS' CONTRIBUTIONS AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2019

	R	Feachers' Retirement nd Pension Systems	1	Employees' Retirement nd Pension Systems	 state Police Retirement System	Judges' Retirement System	F	Law Enforcement Officer`s Pension System	Total
Actuarially determined contribution Actual contribution	\$	1,143,586	\$	737,284 (737,284)	\$ 86,172 (86,172)	\$ 21,737 (21,737)	\$	65,314 (65,314)	\$ 2,054,093 (2,054,093)
Contribution deficiency	\$	(1,145,580)	\$	(737,284)	\$ (80,172)	\$ (21,737)	\$	(05,514)	\$ (2,034,093)
Covered payroll	\$	7,153,063	\$	4,415,523	\$ 106,978	\$ 48,935	\$	180,964	\$ 11,905,463
Actual contribution as a percent of covered payroll		15.99%		16.70%	80.55%	44.42%		36.09%	17.25%

for the Fiscal Year Ended June 30, 2018

(Expressed in Thousands)

	F	Teachers' Retirement nd Pension Systems	1	Employees' Retirement Ind Pension Systems	 tate Police Retirement System]	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution	\$	1,122,986	\$	707,194	\$ 80,241	\$	22,465	\$	62,131	\$ 1,995,017
Actual contribution		(1,122,986)		(707,194)	 (80,241)		(22,465)	_	(62,131)	 (1,995,017)
Contribution deficiency	\$	_	\$	_	\$ _	\$	-	\$	_	\$ -
Covered payroll	\$	6,941,097	\$	4,306,746	\$ 100,325	\$	47,498	\$	170,556	\$ 11,566,222
Actual contribution as a percent of covered payroll		16.18%		16.42%	79.98%		47.30%		36.43%	17.25%

SCHEDULE OF EMPLOYERS' CONTRIBUTIONS AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2017

(Expressed in Thousands)

	F	Teachers' Retirement nd Pension Systems]	Employees' Retirement Ind Pension Systems	 tate Police etirement System	R	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution	\$	1,137,472	\$	730,506	\$ 83,000	\$	21,861	\$	60,473	\$ 2,033,312
Actual contribution		(1,137,472)		(730,506)	 (83,000)		(21,861)		(60,473)	 (2,033,312)
Contribution deficiency	\$	_	\$	_	\$ -	\$	_	\$	_	\$ _
Covered payroll	\$	6,780,838	\$	4,324,315	\$ 100,384	\$	46,876	\$	166,561	\$ 11,418,974
Actual contribution as a percent of covered payroll		16.77%		16.89%	82.68%		46.64%		36.31%	17.81%

SCHEDULE OF EMPLOYERS' CONTRIBUTIONS AND RELATED RATIOS

for the Fiscal Year Ended June 30, 2016

	F a	Teachers' Retirement nd Pension Systems	1	Employees' Retirement nd Pension Systems	 tate Police Actirement System	R	Judges' Retirement System	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution	\$	1,112,989	\$	689,431	\$ 72,320	\$		\$ 54,959	\$ 1,948,083
Actual contribution		(1,084,049)		(640,943)	 (72,320)		(18,384)	 (54,959)	 (1,870,655)
Contribution deficiency (excess)	\$	28,940	\$	48,488	\$ -	\$	-	\$ _	\$ 77,428
Covered payroll	\$	6,611,038	\$	4,250,288	\$ 93,491	\$	44,711	\$ 156,396	\$ 11,155,924
Actual contribution as a percent of covered payroll		16.40%		15.08%	77.36%		41.12%	35.14%	16.77%

for the Fiscal Year Ended June 30, 2015

(Expressed in Thousands)

	F	Teachers' Retirement nd Pension Systems]	Employees' Retirement and Pension Systems	 tate Police Retirement System	1	Judges' Retirement System	E	Law nforcement Officer`s Pension System	Total
Actuarially determined contribution Actual contribution	\$	1,189,318 (1,063,763)	\$	766,782 (643,219)	\$ 76,056 (76,056)	\$	19,028 (19,028)	\$	56,546 (56,546)	\$ 2,107,730 (1,858,612)
Contribution deficiency (excess)	\$	125,555	\$	123,563	\$ (70,050)	\$	(1),020)	\$	(30,340)	\$ 249,118
Covered payroll	\$	6,470,706	\$	4,305,637	\$ 91,050	\$	44,613	\$	151,955	\$ 11,063,961
Actual contribution as a percent of covered payroll		16.44%		14.94%	83.53%		42.65%		37.21%	16.80%

SCHEDULE OF INVESTMENT RETURNS

Fiscal Year Ended	Annual money-weighted rate of return, net of investment expenses
2015	2.68%
2016	1.16%
2017	10.02%
2018	8.08%
2019	6.44%
2020	3.50%
2021	26.69%
2022	-2.97%
2023	3.11%
2024	6.89%

(*) This disclosure is intended to capture performance net of pension plan investment expense, which has been adjusted for changing amounts actually invested, taking into consideration benefit payments and contributions. Currently, the Agency is experiencing net outflows resulting in contributions being used to pay benefits rather than flowing through invested funds; therefore, there is minimal variation between this schedule and the time-weighted rates of return presented in the Investment Section of this report.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

1 ACTUARIAL METHODS AND ASSUMPTIONS

A. Funding Method

All six Systems use the individual entry age normal method to determine costs. Under this funding method, a total contribution rate is determined which consists of two elements, the normal cost rate and the Unfunded Actuarial Liability (UAL) rate.

The individual Entry Age Normal cost rate is determined as the value, as of age at entry into the plan, of the member's projected future benefits, and divided by the value, also as of the member's entry age, of the member's expected future salary. For purposes of calculating the normal cost rate, the same benefit accrual rates used to calculate the present value of future benefits are used to calculate the normal cost. The benefit provisions applicable to each member are used in developing his/her individual normal cost rate.

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 for all members is the actuarial liability less the actuarial value of the System's assets.

The System's unfunded actuarial liability is funded over a 25-year closed amortization period ending June 30, 2040 (15 years remaining as of the June 30, 2024 valuation date) as a level percentage of payroll.

There is an additional component in the Unfunded Actuarial Accrued Liability amortization contribution rate that accounts for the effects of the lag between the valuation date and when the contribution is made. This calculation assumes the contributions that would be received in fiscal year 2025 are equal to the budgeted contributions developed in the valuation as of June 30, 2022, plus the proportionate share of reinvested savings allocated to each System for fiscal year 2025 under the pension reforms.

A portion of the savings from the 2011 pension reforms passed by the General Assembly are to be reinvested as additional contributions into the Systems. Beginning in fiscal year 2016, \$75 million of additional contributions are to be reinvested each year until the combined System reaches 85% funded.

B. Asset Valuation Method

All six Systems use a method based on the principle that the difference between actual and expected investment returns should be subject to partial recognition to smooth out fluctuations in the total return achieved by the fund from year to year. Under this method, the actuarial value of assets reflects annually one-fifth of the market value gains or losses for the five prior years. The resulting value is restricted to be not less than 80% of market value nor greater than 120% of market value.

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. The most recent analysis of the System's experience was performed in 2024 and new assumptions were adopted for the June 30, 2024 valuation. Differences between assumed and actual experience (i.e., actuarial gains and losses) are part of the unfunded actuarial liability. The Total Pension Liability as of June 30, 2024 includes the impact of benefit changes (special death benefit for Judges) and assumption changes associated with the 2024 Experience Study for the period July 1, 2018 to June 30, 2023. These changes first affected the 2024 actuarial valuation which computes the employer contribution for fiscal year 2026. The actuarial assumptions used to determine contribution rates for the fiscal year ending June 30, 2024 were as follows:

Valuation Date:

June 30, 2022

Inflation :	2.25% general, 2.75% wage
Salary Increases:	2.75% to 11.25% including inflation
Investment Rate of Return:	6.8%
Mortality: mortality improvements based of	Various versions of the Pub-2010 Mortality Tables with projected generational on the MP-2018 fully generational mortality improvement scale.

Maryland State Retirement and Pension System

OTHER 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 AL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll c	UAAL as a Percentage of Covered Payroll [(b - a) / c]
2015	\$ 46,170,624	\$ 66,281,781	\$ 20,111,157	69.66%	\$ 11,063,961	182%
2016	47,803,679	67,781,924	19,978,245	70.53%	11,155,924	179%
2017	50,250,465	69,986,576	19,736,111	71.80%	11,418,974	173%
2018	52,586,528	72,574,689	19,988,161	72.46%	11,566,220	173%
2019	54,361,969	74,526,000	20,164,031	72.94%	11,905,463	169%
2020	56,246,776	76,471,035	20,224,259	73.55%	12,501,422	162%
2021	62,817,938	81,738,557	18,920,619	76.85%	12,749,247	148%
2022	65,798,923	85,248,064	19,449,141	77.19%	13,201,815	147%
2023	67,985,366	90,319,369	22,334,003	75.27%	14,384,589	155%
2024	70,325,764	95,774,916	25,449,152	73.43%	15,650,353	163%

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 the June 30, 2024 actuarial valuation date and each of the 10 preceding years. The data presented in the schedule was 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. The System is fully funded if the funded ratio is greater than or equal to 100 percent. During the year ended June 30, 2024 the System's funded ratio decreased from 75.27%.to 73.43%.

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 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 contribute based on the active participants covered payroll. During the year ended June 30, 2024, the System's ratio of the unfunded actuarial accrued liability to its covered payroll increased from 155% to 163%.

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:

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.

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.

Expense Fund

All of the System's administrative and investment management expenses are recorded in the Expense Fund. During the year, the System's investment expenses are covered by funds transferred from the Accumulation Fund, and the System's administrative expenses are covered by administrative fees assessed and collected from each participating employer into the Accumulation Fund and transferred to the Expense Fund to cover annual operating and administrative expenses of the System.

SCHEDULE OF ADMINISTRATIVE EXPENSES

for the Fiscal Years Ended June 30, 2024 and 2023

(Expressed in Thousands)

		2023		
Personnel services				
Staff salaries	\$	22,624	\$	13,045
Fringe benefits		10,283		6,643
Total personnel services		32,907		19,688
Professional and contractual services				
Actuarial services		143		358
Legal and financial services		5,981		827
Consulting services		-		146
Data processing services		3,661		4,004
Other contractual services		3,362		16,147
Total professional and contractual services		13,147		21,482
Miscellaneous				
Communications		697		800
Rent		2,049		2,020
Equipment and supplies		320		446
Other		1,676		1,578
Total miscellaneous		4,742		4,844
Total Administrative Expenses	\$	50,796	\$	46,014

SCHEDULE OF INVESTMENT EXPENSES

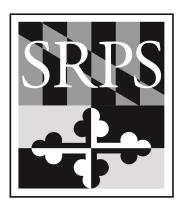
for the Fiscal Years Ended June 30, 2024 and 2023

		anagement Fees for 2024		ncentive Fees for 2024		Total	Management Fees for 2023		ncentive Fees for 2023		Total
Investment advisors		2024		2024		TUTAL	2023		2023		10101
	¢	(0.05(¢	11 404	¢	70 550	\$ 72.314	¢	(2, 10.4)	¢	70 120
Public equity	\$	68,056	\$	11,494	\$	79,550	+,	\$	(2,194)	\$	70,120
Rate Sensitive		17,085		15,294		32,379	15,528		13,994		29,522
Credit opportunity		28,873		419		29,292	24,252		152		24,404
Real return		23,282		-		23,282	17,957		157		18,114
Absolute return		46,347		25,708		72,055	49,807		43,337		93,144
Commodity		-		622		622	_		537		537
Multi Asset		1,110		-		1,110	1,113		_		1,113
Private equity		133,621		-		133,621	125,807				125,807
Real estate		50,016		3,068		53,084	55,067		4,549		59,616
Total investment advisory fees		368,390		56,605		424,995	361,845		60,532		422,377
Other investment service fees											
Currency overlay		3,699		_		3,699	3,195		_		3,195
Other investment expenses		5,467		_		5,467	4,898				4,898
Total other investment service											·
fees		9,166		-		9,166	8,093		_		8,093
Total Investment Expenses	\$	377,556	\$	56,605	\$	434,161	\$ 369,938	\$	60,532	\$	430,470

SCHEDULE OF FUND BALANCES

for the Fiscal Year Ended June 30, 2024 (with Comparative 2023 Totals)

	Annuity	•	· · · · · · · · · · · · · · · · · · ·		E		Та	tals	
	 Savings Fund	A	ccumulation Fund		Expense Fund		2024		2023
Fund Balances, Beginning of Year	\$ 12,230,241	\$	52,660,511	\$	2,221	\$	64,892,973	\$	64,310,991
Additions									
Net investment income (loss)	_		4,850,936		(434,161)		4,416,775		1,980,277
Contributions (Note 5):							-		
Employers	_		1,801,786		32,265		1,834,051		1,700,314
Members	1,056,173		_		_		1,056,173		963,702
State contributions on behalf of									
local governments	-		784,265		_		784,265		738,603
Contribution interest	-		-		-		-		_
Deductions									
Benefit payments	_		(4,916,425)		_		(4,916,425)		(4,653,163)
Refunds (Note 6)	(107,308)		_		_		(107,308)		(101,737)
Administrative expenses (Note 2)	_		(17,941)		(32,855)		(50,796)		(46,014)
Transfers									
From the Accumulation Fund to the Annuity Savings Fund for interest credited to members' accounts	600,884		(600,884)		_		_		_
To the Accumulation Fund from the Annuity Savings Fund for contributions of retiring members	(567,044)		567,044		-		-		-
From the Accumulation Fund to the Expense Fund for administrative and investment expenses	_		(434,157)		434,157		_		_
Net changes in fund balances	 982,705	_	2,034,624	_	(594)	_	3,016,735		581,982
Fund Balances, End of Year	\$ 13,212,946	\$	54,695,135	\$	1,627	\$	67,909,708	\$	64,892,973



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MARYLAND STATE RETIREMENT SCHEDULE OF FIDUCIARY NET

as of June 30, 2024

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems			Employees' Retirement and Pension Systems		State Police Retirement System	
ASSETS							
Cash & cash equivalents (note 3)	\$	1,354,446	\$	767,477	\$	67,049	
Receivables:							
Contributions:							
Employers		39,882		65,859		6,137	
Members		969		12,746		437	
Accrued investment income		158,757		86,639		7,461	
Investment sales proceeds		179,865		98,044		8,441	
Due from other systems		82,540		55,109		422	
Total receivables		462,013		318,397		22,898	
Investments, at fair value (Notes 2 & 3)							
U.S. Government obligations		3,574,507		1,973,119		168,910	
Domestic corporate obligations		1,698,358		937,490		80,254	
International obligations		1,031,794		569,548		48,757	
Domestic stocks		6,554,329		3,617,975		309,719	
International stocks		6,030,638		3,328,898		284,973	
Mortgages & mortgage-related securities		1,182,914		652,966		55,898	
Alternative investments		19,763,748		10,909,544		933,919	
Collateral for loaned securities		2,950,982		1,609,545		138,723	
Total investments		42,787,270		23,599,085		2,021,153	
Total assets		44,603,729		24,684,959		2,111,100	
LIABILITIES							
Accounts payable & accrued expenses (Note 7)		35,587		31,648		1,947	
Investment commitments payable		446,434		243,828		21,002	
Obligation for collateral for loaned securities		2,950,982		1,609,545		138,723	
Due to other systems		50,236		100,391		(26)	
Total liabilities		3,483,239		1,985,412		161,646	
Net position restricted for pensions	\$	41,120,490	\$	22,699,547	\$	1,949,454	

(*) Intersystem due from/to have been eliminated in the financial statements

AND PENSION SYSTEM POSITION BY SYSTEM

Judges' Retirement System	Law Enforcement Officer`s Pension System	Subtotal	Eliminations*	Combined Total
\$ 24,18	7 \$ 52,459	\$ 2,265,618	\$	\$ 2,265,618
16) 3,964	116,002	_	116,002
	5 477	14,634	_	14,634
2,34	5,560	260,758	_	260,758
2,64	6,389	295,384	_	295,384
	- 12,641	150,712	(150,712)	
5,15	29,031	837,490	(150,712)	686,778
52,67	5 131,667	5,900,878	_	5,900,878
25,02	62,559	2,803,689	_	2,803,689
15,20	5 38,006	1,703,310	_	1,703,310
96,58	7 241,428	10,820,038	_	10,820,038
88,87) 222,138	9,955,517	_	9,955,517
17,43	43,573	1,952,783	_	1,952,783
291,24	7 727,996	32,626,454	-	32,626,454
43,43	5 105,330	4,848,015	_	4,848,015
630,47	9 1,572,697	70,610,684		70,610,684
659,81	1,654,187	73,713,792	(150,712)	73,563,080
82	5 1,369	71,376	_	71,376
6,58		733,981	_	733,981
43,43		4,848,015	_	4,848,015
10		150,712	(150,712)	-
50,94		5,804,084	(150,712)	5,653,372
\$ 608,86	3 \$ 1,531,349	\$ 67,909,708	\$ -	\$ 67,909,708

MARYLAND STATE RETIREMENT SCHEDULE OF CHANGES IN

for the Fiscal Year Ended

(Expressed in Thousands)

	Teachers' Retirement and Pension Systems	Employees' Retirement and Pension Systems	State Police Retirement System
ADDITIONS			
Contributions			
Employers	\$ 488,140	\$ 1,099,639	\$ 115,333
Members	636,103	385,842	11,393
State contributions on behalf of local governments	784,265	_	_
Total Contributions	1,908,508	1,485,481	126,726
Investment Income			
Net appreciation (depreciation) in fair value of	1,147,268	631,877	54,188
Interest	419,592	233,652	19,920
Dividends	1,358,303	750,107	64,186
Income Before Securities Lending Activity	2,925,163	1,615,636	138,294
Gross income from securities lending activity	188,536	104,078	8,905
Securities lending borrower rebates	(174,461)	(96,308)	(8,240)
Securities lending agent fees	(704)	(389)	(33)
Net income from securities lending activity	13,371	7,381	632
Total Investment Income	2,938,534	1,623,017	138,926
Less investment expenses:			
Investment expenses	(262,972)	(145,229)	(12,441)
Net investment income	2,675,562	1,477,788	126,485
Transfers from other systems			
Total Additions	4,584,070	2,963,269	253,211
DEDUCTIONS			
Benefit payments	2,795,799	1,817,473	154,308
Refunds (Note 6)	53,297	52,739	261
Administrative expenses (Note 2)	29,755	20,181	310
Transfers to other systems	5,962	(4,317)	(75)
Total Deductions	2,884,813	1,886,076	154,804
Net (decrease) increase in plan assets	1,699,257	1,077,193	98,407
Net position restricted for pensions Beginning of the fiscal year	39,421,233	21,622,354	1,851,047
End of the Fiscal Year	\$ 41,120,490	\$ 22,699,547	\$ 1,949,454

(*) Intersystem due from/due to have been eliminated in the financial statements

AND PENSION SYSTEM FIDUCIARY NET POSITION BY SYSTEM

June 30, 2024

	Judges' Retirement System	Law Enforcement Officer`s Pension System	Total
\$	26,085	\$ 104,854	\$ 1,834,051
Ψ	4,255	18,580	1,056,173
			784,265
	30,340	123,434	3,674,489
	16,942	41,635	1,891,910
	6,452	15,247	694,863
	20,114	49,385	2,242,095
	43,508	106,267	4,828,868
	2 702	6 920	211 150
	2,792 (2,583)	6,839 (6,329)	311,150 (287,921)
	(2,585)	(0,329) (25)	(1,161)
	199	485	22,068
	43,707	106,752	4,850,936
	, , , , , , , , , , , , , , , , , , , ,		
	(3,894)	(9,625)	(434,161)
	39,813	97,127	4,416,775
	57,015		
	70,153	220,561	8,091,264
	46,027	102,818	4,916,425
	59	952	107,308
	76	474	50,796
	31	(1,601)	-
	46,193	102,643	5,074,529
	23,960	117,918	3,016,735
	584,908	1,413,431	64,892,973
\$	608,868	\$ 1,531,349	\$ 67,909,708



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CHIEF INVESTMENT OFFICER'S REPORT

INVESTMENT OVERVIEW

The Maryland State Retirement and Pension System returned 6.93 percent net of fees in fiscal year 2024, relative to the actuarial return target of 6.80 percent, and 6.34 percent for its policy benchmark. Including the payment of benefits, the market value of assets increased by approximately \$3 billion, from \$65.2 billion on June 30, 2023 to \$68.2 billion on June 30, 2024.

While negative performance in long duration Treasury bonds persisted in fiscal year 2024 as the Federal Reserve completed its rate hiking cycle and kept short-term borrowing costs at elevated levels for the balance of fiscal year 2024, stocks posted strong returns as the economic backdrop remained supportive of most risk assets. The System's public equity portfolio returned 17.9 percent while the bond portfolio achieved -1.1 percent. The fiscal year performance was not evenly distributed across the other asset classes as the System's credit-related investments achieved strong returns, while real estate generated negative performance. The credit portfolio produced a return of 9.8 percent for the fiscal year, while real estate was the weakest asset class at -7.7 percent.

The Board's asset allocation policy is designed to achieve the actuarial rate of return over long periods of time by assembling a diversified portfolio of asset classes, each of which may have a large or small, positive or negative return in any given year. By assembling assets that exhibit distinct risk and return characteristics in different market environments, the Board expects more stable investment returns over time than a less diversified portfolio. This lower risk portfolio should result in a larger asset pool for the System's beneficiaries than a more volatile portfolio with the same average return. Understanding the Board's principals of asset allocation is important in evaluating the performance in any one-year period. While the realized return of 6.93 percent for fiscal year 2024 marginally exceeds the long-term actuarial target of 6.8%, the typical range of annual variations is expected to be significantly wider than the experience of fiscal year 2024.

The System's asset allocation is organized into five broad categories: Growth/Equity, Rate Sensitive, Credit, Real Assets, and Absolute Return. While the Board made no changes to the asset allocation in fiscal year 2024, Investment Division staff implemented policy adjustments that were approved in the prior fiscal year. These included modest increases to U.S. equity and international equity and corresponding decreases in emerging markets equity. These changes are expected to enhance the risk and return profile of the portfolio. The Growth/Equity portfolio is comprised of public equity and private equity. Within public equity, there are dedicated allocations to U.S., international developed, and emerging markets. The objective of this asset class is to generate high returns associated with the economic growth underlying global economies.

The Rate Sensitive category consists of exposure to core, or investment-grade, bonds. This asset class is designed to provide protection against most downturns in the equity market by offering a reliable income stream through the yield component. This yield also provides some protection against a deflationary environment, characterized by falling interest rates. This asset class includes long-duration U.S. Treasury bonds, Treasury inflation protected securities, corporate bonds and securitized debt.

The purpose of the Credit asset class is to take advantage of the potential higher returns offered by below investment-grade bonds. The return objective is similar to public equity, with a lower risk profile. This category includes high yield bonds, bank loans, emerging markets debt, distressed debt, mezzanine debt, and other credit-focused investments.

Real Assets includes real estate, natural resources and infrastructure investments. A significant portion of the assets in this category provides a regular income stream. Due to the tangible, or real, element of this asset class, it is expected to provide some level of protection against an inflationary environment, as well as additional diversification to the total portfolio.

The objective of the Absolute Return asset class is to achieve a return that falls between the expectations for public equity and bonds, with low correlation to other asset classes. The risk profile of this asset class is expected to be significantly lower than public equity, which should provide protection during periods of stock market decline. Strategies in this asset class include event-driven, global macro, relative value and opportunistic funds.

INVESTMENT POLICY AND OBJECTIVES

The Board of Trustees is charged with the responsibility of managing the assets of the System. In doing so, the Board is required to exercise its fiduciary duties solely in the interest of the participants with the care, skill, and diligence that a prudent person would exercise under similar circumstances. This standard of care encourages diversifying investments across various asset classes. Investment objectives are designed to support the fulfillment of the Board's mission to optimize risk-adjusted returns to ensure that sufficient assets are available to pay benefits to members and beneficiaries when due. As a long-term investor, the Board understands that short-term market returns will fluctuate.

These investment objectives are implemented in accordance with investment policies developed by the Board. The "prudent person standard", as outlined in both the Maryland Annotated Code and the Board's investment policies, allows the Board to set investment policies and delegate authority to investment professionals employing active and passive strategies. Firms that have been retained generally have a demonstrated performance record and a clearly defined and consistently applied investment process.

The Board manages the assets for the System with the goal of achieving an annualized investment return that over a longterm time frame: (1) meets or exceeds the investment policy benchmark for the System; (2) in nominal terms, equals or exceeds the actuarial investment return assumption adopted by the Board; and (3) in real terms, exceeds the U.S. inflation rate by at least 3 percent. A more detailed discussion of each of these goals follows below.

- 1. Meeting or exceeding the Investment Policy Benchmark for the System. The Investment Policy Benchmark is calculated by using a weighted average of the Board-established benchmarks for each asset class. This benchmark enables the comparison of the actual performance of the System to a proxy portfolio and provides a measure of the contribution of policy implementation and active management to overall fund returns.
- 2. In nominal terms, meeting or exceeding the actuarial investment return assumption of the System. The Board adopts the actuarial rate of interest, which was set at 6.80 percent for fiscal year 2024. The actuarial investment return assumption functions as an estimate of the longterm rate of growth of the assets for the System. In adopting an actuarial return assumption, the Board anticipates that the investment portfolio will achieve higher or lower returns each year but will trend toward 6.80 percent over time.
- 3. In real terms, exceeding the U.S. inflation rate by at least 3 percent. The inflation related objective compares the investment performance against a rate of inflation measured by the Consumer Price Index (CPI) plus 3 percent. The inflation measure provides a link to the liabilities of the System, which have an embedded sensitivity to changes in the inflation rate.

The Board is also responsible for establishing the asset allocation policy for the System. It does this by weighing three liability-oriented objectives when making asset allocation determinations. These objectives include:

- 1. achieving and maintaining a fully funded pension plan;
- 2. minimizing contribution volatility year to year; and
- 3. realizing surplus assets.

Asset allocation policy targets are determined by recognizing that liabilities (future benefit payments to the participants and beneficiaries of the System) must be paid in full and on time. The mix of asset classes is chosen to provide sufficient growth to meet the long-term return objective of the System, while providing sufficient diversification to moderate the volatility of that return. For example, a portfolio of equities will likely provide the required return over a long time horizon but will subject the market value of the portfolio to unacceptable levels of volatility such that the goals of minimizing contribution volatility and realizing surplus assets would be difficult to achieve. Combining other asset classes with equities will provide differentiated return sources, reduce the volatility of returns and help realize those liability-oriented objectives.

The Board's long-term asset class targets and ranges as of June 30, 2024 are shown below.

ASSET CLASS	LONG-TERM POLICY TARGET	RANGE
Growth/Equity	50%	+/-7 %
U.S Equity	17%	, . , .
International Developed Equity	11%	
Emerging Markets Equity	6%	
Private Equity	16%	
Rate Sensitive	20%	+/-5 %
Long-term Government Bonds	10%	
Securitized/Corporate Bonds	6%	
TIPS	4%	
Credit	9%	+/-4 %
High Yield Bonds/Bank Loans	8%	
Emerging Market Debt	1%	
Real Assets	15%	+/-4 %
Real Estate	10%	
Natural Resources/		
Infrastructure	5%	
Absolute Return	6%	+/-4 %
Total Assets	100%	

INVESTMENT PERFORMANCE

Investment performance is calculated using time-weighted rates of total return, including the impact of fees and expenses. Total return includes interest and dividends, as well as capital appreciation. The investment program realized a return of 6.93 percent, net of all fees, for fiscal year 2024. Annualized returns for the 3-, 5-, 10-, 20- and 25-year periods ending June 30, 2024 were 2.3 percent, 7.0 percent, 6.3 percent, 6.4 percent and 5.6 percent, respectively.

	FY 2024 SRPS Performance	FY 2024 Benchmark Performance	SRPS Exposure June 30, 2024
Public Equity	17.9%		30.8%
Custom Benchmark		17.3 %	
U.S. Equity	24.6%		14.2%
Russell 3000		23.1%	
International Equity	12.6%		8.1 %
MSCI World ex U.S.		11.2 %	
Emerging Markets Equity	9.9%		4.9%
MSCI Emerging Markets		12.6%	
Global Equity	19.6%		3.6%
MSCI AC World Index		19.4 %	
Private Equity	5.2 %		21.6%
Custom State Street PE		6.3 %	
Rate Sensitive	-1.1%		16.5%
Custom Benchmark		-1.2%	
BBG U.S. Gov't Long Index		-5.6%	
BBG Securitized		2.4 %	
BBG Corporate		4.6%	
BC U.S. TIPS Index		2.5 %	
Credit/Debt Strategies	9.8%		8.9%
Custom Benchmark		10.3 %	
BBG High Yield		10.4 %	
S&P LSTA Leveraged Loan		11.1%	
BBG EM Hard Currency Sov		8.5 %	
BBG EM USD Corporate		7.7 %	
Real Assets	-2.8 %		14.2 %
Custom Benchmark		-5.4 %	
Absolute Return	5.9%		5.8%
Custom Benchmark		8.4 %	
Multi-Asset			
Custom Benchmark	9.9%		0.4 %
		6.30 %	
Cash	5.6%		1.8 %
Custom Benchmark		5.6%	
TOTAL FUND	6.9%	6.3%	100%

The allocation as of June 30, 2024 reflects the ranges and transitional targets of the System as described in the previous section.

ECONOMIC AND CAPITAL MARKET OVERVIEW

Investment returns between asset classes varied significantly in fiscal year 2024, with growth-oriented assets like public stocks and credit generating strong performance, while interest rate sensitive investments like real estate and long-duration Treasury bonds achieved negative returns. The Federal Reserve completed its interest rate hiking cycle in July 2023, taking the upper range of the federal funds rate to 5.50% to get inflation under control and on a path toward the 2% target. In total, the Federal Reserve raised rates eleven times during this cycle which began in March 2022. These actions have been successful in reducing the growth rate of prices, as measured by the Consumer Price Index, which has receded from its high of 9.1% in June 2022 to 3.0% as of June 30, 2024.

Contrary to conventional thinking and historical precedence, the U.S. economy has been resilient in the face of higher interest rates, with real gross domestic product over fiscal year 2024 rising 3%. This economic growth has been fueled a robust labor market, healthy wage gains and strong consumer spending. The unemployment rate at the end of the fiscal year was 4.0%, only slightly higher than the 3.8% rate when the Fed began raising rates in March 2022. These factors, in addition to enhanced developments and utilization of generative artificial intelligence, fueled strong stock returns in fiscal year 2024.

This environment of high inflation and rising interest rates is not conducive for generating attractive returns in long duration bonds and other interest rate sensitive sectors like real estate. The real estate sector, particularly office properties, continues to be challenged by valuation adjustments stemming from changes in how properties are being utilized; for example, companies requiring less office space due to the continuation of hybrid work models. Higher rates also present refinancing risk, particularly on highly levered properties, as loans financed at low interest rates several years ago must be refinanced at significantly higher levels. Over the course of the fiscal year, the ten-year Treasury yield climbed from roughly 3.85% to 4.40%, a meaningful increase for borrowers with loans that need to be refinanced.

PUBLIC EQUITIES

As of June 30, 2024, approximately \$21.0 billion was invested in public equities, representing 30.7 percent of total assets. The public equity program consists of four components: U.S. equities, international developed equities, emerging markets equities and global equities. The Terra Maria program, which seeks to identify promising smaller or developing management firms, is an integral part of the public equities' asset class. As of June 30, 2024, 75 percent of the public market Terra Maria program was invested in equities, and 25% was invested in fixed income strategies. Each of the managers in the Terra Maria program has an active management mandate. A more detailed discussion of the Terra Maria program follows below.

A. U.S. Equities

As of June 30, 2024, approximately \$9.7 billion, or 14.2 percent of total assets, was invested in U.S. public equities. Passively managed U.S. equities totaled \$4.5 billion, while Terra Maria program assets were \$368 million, representing 6.3 percent, and 0.6 percent of total assets, respectively.

U.S. Equity	\$ N	fillions	% of Total Plan
Passively/Enhanced Managed	\$	4,492	6.6%
Actively Managed	\$	4,797	7.0%
Terra Maria Program	\$	368	0.5%
Total U.S. Equity	\$	9,657	14.1%

For fiscal year 2024, U.S. equities returned 24.6 percent, compared to 23.1 percent for its benchmark, the Russell 3000 Index.

B. International Equities

As of June 30, 2024, approximately \$5.5 billion, or 8.1% of total assets, was invested in international equities. Passively managed international equities totaled \$2.0 billion, while Terra Maria assets were \$1.3 billion, representing 2.9%, and 1.9% of total assets, respectively. As more fully described below, in 2009 the System instituted a currency overlay program which is designed to protect the value of some foreign equities in a rising dollar environment.

International Equity	\$ N	Aillions	% of Total Plan
Passively Managed	\$	1,960	2.9%
Actively Managed	\$	2,249	3.3%
Terra Maria Program	\$	1,303	1.9%
Currency Overlay	\$	17.2	0.0%
Total International Equity	\$	5,531	8.1%

For fiscal year 2024, international equities, including the impact of the currency overlay program, returned 12.6%, compared to 11.2% for its benchmark, the MSCI World ex-U.S. Index.

C. Emerging Market Equities

As of June 30, 2024, approximately \$3.3 billion, or 4.9% of total assets, was invested in emerging market equities. The portfolio is comprised of actively managed assets.

Emerging Markets Equity	\$ Millions	% of Total Plan
Total Emerging Markets Equity	\$3,321	4.9%

For the fiscal year, the portfolio returned 9.9% compared to 12.6% for the MSCI Emerging Market Index.

D. Global Equities

As of June 30, 2024, approximately \$2.4 billion, or 3.6% of total assets was invested in global equities, which includes both U.S. and foreign stocks. This portfolio is comprised mostly of active mandates.

		% of Total
Global Equity	\$ Millions	Plan
Passive/Overlay Accounts	\$138	0.2%
Actively Managed	\$2,305	3.4%
Currency Overlay	\$1.4	0.0%
Total Global Equity	\$2,444	3.6%

For the fiscal year, the portfolio returned 19.6% compared to 19.4% for the MSCI AC World Index.

CURRENCY OVERLAY PROGRAM

The currency overlay program was implemented in May of 2009. An objective of the program is to provide insurance against a strengthening dollar, which could negatively impact returns from foreign currency denominated equities. The manager in this program uses a systematic currency overlay strategy and generally, does not make fundamental currency valuation assessments. The strategy is also dynamic in that the degree to which currency hedging is applied changes depending on currency market conditions. The manager in this program uses low hedge ratios when the dollar is weakening, and high hedge ratios when the dollar is strengthening.

During fiscal year 2024, the currency program generated positive value in the System's foreign equity holdings, as the U.S. dollar strengthened modestly relative to other currencies. The added value of the currency hedging program during the fiscal year was \$21.0 million. Since the inception of the currency hedging program, it has served to reduce volatility and improve the risk/return profile of the System's international and global equity portfolios.

PRIVATE EQUITY

As of June 30, 2024, private equity totaled \$14.8 billion, or 21.6% of total assets. This asset class includes buyouts, growth equity, venture capital, secondaries and funds-of-funds.

In fiscal year 2024, commitments were made to 15 private equity funds and co-investments, totaling \$629 million. Since the inception of the private equity program in fiscal year 2005, \$23.0 billion in commitments have been made to 341 different funds and co-investments. Unfunded commitments totaled \$5.0 billion as of June 30, 2024. Future commitments will follow a pacing model designed to achieve and maintain the target allocation. In fiscal year 2024, the private equity program generated a time-weighted return of 16.9%, compared to 17.3% for its benchmark, the State Street Private Equity Index. This return is net of all fees, expenses and carried interest.

RATE SENSITIVE

As of June 30, 2024, the rate sensitive portfolio represented \$11.3 billion, or 16.5% of total assets. The rate sensitive portfolio returned -1.1% for the year, compared to -1.2% for its blended benchmark: 50% Bloomberg US Government Long Bond Index, 15% Bloomberg US Investment Grade Corporate Index, 15% Bloomberg US Securitized MBS/ABS/CMBS Index, and 20% Bloomberg US Government Inflation Linked Index.

CREDIT/DEBT STRATEGIES

The credit/debt strategies portfolio totaled approximately \$6.1 billion, representing 8.9% of total plan assets as of June 30, 2024. Investments in this asset class are held in both liquid and illiquid structures. Typical asset types in the portfolio include: high yield bonds, bank loans, emerging market debt, and private debt. The portfolio has a blended benchmark of 89 percent U.S. (80% Bloomberg U.S. Corporate High Yield Index, 20% S&P LSTA Leveraged Loan Index), and 11 percent Non-U.S. (50% Bloomberg EM Hard Currency Sovereign Index, 50% Bloomberg EM USD Corporate Index). The portfolio returned 9.8% for the fiscal year, versus 10.3% for its benchmark.

REAL ASSETS

The real assets portfolio totaled approximately \$9.7 billion, representing 14.2% of total assets as of June 30, 2024. The objectives of this asset class are to provide a level of protection against inflation, and to enhance diversification for the total fund. As of June 30, 2024, the largest component of the asset class was real estate, totaling \$6.4 billion, or 9.4% of total assets. The remaining assets consisted of investments associated with natural resources and infrastructure totaling \$3.3 billion or 4.8% of total assets.

The real assets portfolio returned -2.8% for the fiscal year, compared to -5.4% for its blended benchmark, which consists of approximately 67% real estate with the remainder in natural resources and infrastructure. Real estate achieved a -7.7% return, versus the real estate benchmark return of -9.6%. The natural resources and infrastructure portion of the portfolio achieved a return of 7.2%, outperforming its benchmark by 2.6%, as the System's exposure to energy-related investments exceeded the public market benchmarks.

ABSOLUTE RETURN

The absolute return portfolio totaled approximately \$4.0 billion, representing 5.8% of total assets as of June 30, 2024. The portfolio consists of event-driven, global macro, relative value, equity long/short and opportunistic funds. Its goal is to provide diversification for the total plan through its low correlation to the broad financial markets. The absolute return portfolio returned 5.9%, compared to the 8.4% return for its benchmark.

TERRA MARIA PROGRAM

As previously mentioned, the Terra Maria program seeks to identify promising smaller or developing managers. The three public market program managers serve as an extension of staff to source investment managers, perform manager due diligence, monitor managers and prepare manager "hire/fire" and funding recommendations. The managers include Attucks Asset Management, Xponance, Inc., and Leading Edge Investment Advisors.

Terra Maria publicly-traded assets totaled approximately \$2.4 billion, or 3.4 percent of total assets at June 30, 2024. The program returned 9.1% for the fiscal year, outperforming its custom benchmark return of 8.9%. The relative performance results have also remained positive since the April 2007 inception of the program. The System also invests in emerging managers in other asset classes. In private markets, the value of assets managed by developing managers totaled \$2.6 billion.

At the end of fiscal year 2024, \$8.3 billion, or 12.1 percent of the System's total assets, were managed by minority and women-owned firms.

INVESTMENT MANAGEMENT FEES

The asset allocation of the System is the primary determinant of returns. The asset allocation is also the primary determinant in the cost of investing the assets. Thirty-two percent of the policy allocation does not have public market benchmarks and therefore does not have a passive option for implementation. These alternative assets such as closed-end limited partnerships used for private equity, infrastructure and some real estate, in addition to open-end partnerships used for real estate and hedge fund strategies are included in the asset allocation with the objective of earning higher returns over time, reducing risk by providing returns that are differentiated from stock and bond returns, or for both reasons.

These alternative assets are typically structured as limited partnerships with embedded profit sharing provisions to motivate the manager to make profitable investments, and to ensure alignment of interests. Carried interest represents the portion of the investment profits that is earned by managers, and is only paid if performance thresholds are achieved. The percentage of profits that is allocated to the manager is substantially lower than the amount received by the System. Because of this disproportionate sharing of profits, the amounts realized by the System far exceed any incentive earned by investment managers. Large amounts of carried interest should be considered a positive result, as this would imply much greater gains to the System. In calendar year 2023, the System realized an estimated \$890 million in profits from these private alternative investments, while the investment managers, or general partners, earned roughly \$222.6 million in carried interest incentives.

The Board is mindful of the negative effects fees have on net investment performance and is committed to aggressively negotiating fair and reasonable terms to mitigate the drag on performance, while maintaining exposure to investments that exhibit positive risk and return characteristics in a total portfolio context.

CONCLUSION

The investment environment in fiscal year 2024 were strong, led by global equities and fueled by strong consumer spending and robust economic growth. After hiking rates eleven times starting in March 2022 and ending in July 2023 for an aggregate increase of 5.25%, the Federal Reserve paused and kept rates elevated for the duration of fiscal year 2024. With inflation approaching the Fed's target of 2% and continued resiliency in the labor market and economy, the probability of orchestrating a soft landing and avoiding a recession seems stronger based on the data this far. This scenario may set the stage for the next easing cycle in fiscal year 2025 as the Fed balances its dual mandate of full employment and stable prices.

While the Board of Trustees is proud of the fiscal year 2024 performance, the focus continues to be on long-term returns. The System has constructed a diversified portfolio that allows it to collect different cash flow streams that are associated with distinct risk exposures. Short-term investment returns are unpredictable, and the System should expect that individual years of strong investment returns will be mixed with years that produce performance that does not meet expectations. The best way to account for the unknown and achieve long-term objectives is to maintain a balanced and diversified portfolio that is not overly dependent on single economic outcomes. Looking to 2025 and beyond, the investment staff will continue to implement the Board's policies in a prudent and thoughtful way to maximize value for beneficiaries, while being ever mindful of the risks and uncertainties present in the global capital markets.

Respectfully submitted,

Juleus Thure

Andrew C. Palmer CFA Chief Investment Officer



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INVESTMENT PORTFOLIO SUMMARY

as of June 30, 2024 and 2023

(Expressed in Thousands)

		2024		2023		
			Fair Value	% of Fair Value	Fair Value	% of Fair Value
	Rate Sensitive					
	Fixed Income	\$	8,935,102	13.1 %	\$ 8,940,923	13.7%
	Inflation linked bonds		2,267,444	3.3	2,300,720	3.5
(1)	Cash (non-manager)		1,221,860	1.8	292,387	0.4
(2)	Net cash & cash equivalents (manager)		61,367	0.1	(89,805)	(0.1)
	Total Rate Sensitive		12,485,773	18.3	11,444,225	17.5
	Credit					
	High Yield Bond/Bank Loans		5,280,982	7.7	4,912,470	7.5
	Emerging markets debt		691,359	1.0	623,306	1.0
(2)	Net cash & cash equivalents (manager)		118,091	0.2	156,570	0.2
	Total Credit		6,090,432	8.9	5,692,346	8.7
	Equity					
	Domestic stocks		9,471,673	13.9	7,811,729	12.0
	Emerging markets stocks		3,273,978	4.8	4,564,213	7.0
	Global stocks		2,292,642	3.4	2,182,010	3.3
	International stocks		5,373,809	7.9	4,649,474	7.1
(2)	Net cash & cash equivalents (manager)		539,663	0.8	497,236	0.8
	Total Public Equity		20,951,765	30.8	19,704,662	30.2
	Private Equity		14,775,130	21.5	14,247,446	21.9
	Total Equity		35,726,895	52.3	33,952,108	52.1
	Absolute Return		3,959,736	5.8	3,803,238	5.8
	Commodities		172,992	0.3	106,183	0.2
	Real Estate		6,442,490	9.4	6,816,799	10.5
	Multi Asset		259,605	0.4	236,252	0.4
	Natural Resources & Infrastructure		3,071,907	4.5	3,092,767	4.7
(2)	Net cash & cash equivalents (manager)		34,921	0.1	60,086	0.1
	Total Portfolio	\$	68,244,751	100.0 %	\$ 65,204,004	100.0%

(1) Securities lending collateral payable has been netted against the actual collateral. The amounts net to zero.

(2) Includes investment receivables and payables.

Note: This schedule includes assets invested on behalf of the Maryland Transit Administration.

MARYLAND STATE RETIREMENT AND PENSION SYSTEM

INVESTMENT PORTFOLIOS BY MANAGER as of June 30, 2024 (Expressed in Thousands)

	Market Value	Investment Advisory Fees		Market Value	Investment Advisory Fees
Public Equity			Fixed Income Manager		
Axiom International Investors	\$ 481,950	\$ 3,565	Credit Suisse Asset Management	\$ 3,870	\$ 279
Baillie Gifford & Company	1,177,325	5,764	Dodge & Cox	256,876	660
Brown Capital Management	126,867	1,203	Double Line US Securitized	723,616	860
D E Shaw & Company	1,816,484	3,083	Manning & Napier	566,751	549
Dimensional Fund Advisors	935,961	2,038	MetLife Investment Management	735,353	1,773
Durable Capital Partners	709,469	5,324	Nomura	521,183	760
Marshall Wace	713,303	1,938	Pacific Investment Management	801,264	1,354
Polunin Capital Management	460,955	3,803	Pine Bridge Investments	559,650	1,636
Record Currency Management	18,612	3,730	Western Asset Management	1,610,734	2,401
Redwheel Partners	211,329	1,940	Attucks Asset Management (1)	682,048	1,416
Silchester International Investors	301,404	418	Cash & Cash Equitization	1,221,860	N/A
T. Rowe Price Associates	2,355,048	6,290	Other (2)	160	0
Walter Scott & Partners	840,083	3,581	Internally Managed Assets (6)	6,457,881	0
Westwood Global Investment	453,718	4,131	Total Fixed Income	\$ 14,141,246	\$ 11,688
Xponance (1)	206,084	1,249			
Attucks Asset Management (1)	1,205,675	5,097	Alternative Investment		
Leading Edge Invest. Advisors (1)	443,474	2,382	Absolute Return (1)	\$ 3,954,159	\$ 71,513
Other (2)	144,498	2,176	Commodity	172,251	628
			Credit/Debt Related/Rate		
Internally Managed Assets (6)	6,618,311	0	Sensitive (1)	4,434,959	50,496
Total Public Equity	\$ 19,220,550	\$ 57,712	Multi-Asset (3)	259,605	1,119
			Private Equity (1)	14,761,408	134,734
			Public Equity Long/Short (1)	1,744,939	26,229
			Real Assets		
			Harvest Fund Advisors	271,883	1,795
			Tortoise Capital Advisors	183,174	1,022
			Natural Resources &		
			Infrastructure (1)	1,192,177	20,660
			Private Real Estate (1)	6,442,561	53,526
			Other (2)	5,983	6,656
			Internally Managed Assets (6)	1,459,856	0
			Total Alternative Investments	\$ 34,882,955	\$ 368,378
			Total	\$ 68,244,751 (4	4) \$ 437,778

(1) Sub-managers separately listed on the following pages

(2) Consulting fees and/or investment managers no longer under contract as of 6/30/24

(3) Assets that represent the overall allocation

(4) Includes assets invested on behalf of the Maryland Transit Administration.

(5) Includes management fees allocated to the Maryland Transit Administration.

(6) Funds separately listed on the following pages

Note: Investment Advisory Fees represents management fees invoiced or reported on capital statements.

ALTERNATIVE INVESTMENTS RELATIONSHIP LISTING as of June 30, 2024

Private Equity

1315 Capital † 1315 Capital II † 1315 Capital III † Advent International GPE V-D Advent International GPE VI-A Advent International GPE VIIIB Advent International GPE IX Advent International GPE X * Apax Europe VI-A Apax Europe VII-A Apax IX Apollo Investment Fund VIII Apollo Investment Fund IX * Apollo Investment Fund X * Astorg VI Astorg VII Audax Private Equity Fund III Audax Private Equity Fund IV Audax Private Equity Fund V Audax Private Equity Fund VI * Audax Private Equity Fund VII Audax Private Equity Origins Fund I Bain Capital Asia Fund III Bain Capital Asia Fund IV Bain Capital Asia Fund V Bain Capital Europe Fund IV * Bain Capital Europe Fund V Bain Capital Europe Fund VI Bain Capital Fund X Bain Capital Fund XI Bain Capital Fund XII Bain Capital Fund XIII * Bain Capital Life Sciences Fund Bain Capital Life Sciences Fund II Bain Capital Life Sciences Fund III Bain Capital Empire Holdings Baring Asia Fund VI Baring Asia Fund VII Baring Asia Fund VIII * Black River Capital Partners Fund (Agr. A) † Blackstone Capital Partners VI Blackstone Capital Partners VII Blue Wolf Capital Fund III † Blue Wolf Capital Fund IV † Blue Wolf Capital Fund V * Bridgepoint Europe Fund V

Bridgepoint Europe Fund VI Bridgepoint Europe Fund VII * Brinson Partnership 2000 Primary Fund Brinson Partnership 2001 Primary Fund Brinson Partnership 2002 Primary Fund Brinson Partnership 2002 Secondary Fund Brinson Partnership 2003 Primary Fund CDH Fund V ChrysCapital VIII Clayton Dubilier&Rice Fund VIII Clayton Dubilier&Rice Fund IX Clayton Dubilier&Rice Fund X Clayton Dubilier&Rice Fund XI Clayton Dubilier&Rice Fund XII Clearlake Capital Partners III † Clearlake Capital Partners IV Clearlake Capital Partners V Clearlake Capital Partners VI Clearlake Capital Partners VII * Coller International Partners VI Coller International Partners VII Coller International Partners VIII Crescent Capital Partners IV Crescent Capital Partners V CVC Capital Partners VII CVC Capital Partners VIII CVC European Equity Partners V-B Equistone Partners Europe Fund IV Equistone Partners Europe Fund V Equistone Partners Europe Fund VI Everstone Capital Partners II † Everstone Capital Partners III † Frazier Healthcare Growth Buyout Fund VIII Frazier Healthcare Growth Buyout Fund IX * Frazier Healthcare Growth Buyout Fund X * Frazier Healthcare VI Frazier Healthcare VII Frazier LifeSciences VIII Frazier LifeSciences IX Frazier LifeSciences X Frazier Life Sciences XI Frontier Fund III * Frontier Fund IV * Frontier Fund V GGV Capital VII GGV Capital VII Plus

GGV Capital VIII GGV Capital VIII Plus GGV Discovery II GGV Discovery III Goldman Sachs Vintage Fund V Great Hill Equity Partners IV Great Hill Equity Partners V Great Hill Equity Partners VI Great Hill Equity Partners VII * Great Hill Equity Partners VIII Green Equity Investors VII Green Equity Investors VIII Green Equity Investors IX * Harbour Vest Partners VI-Partnership Fund Hellman&Friedman Capital Partners VII Hellman&Friedman Capital Partners VIII Hellman&Friedman Capital Partners IX Hellman&Friedman Capital Partners X Hg Capital 7C Hg Capital 8A Hg Genesis 9 Hg Genesis 10 A Hg M1 Co-Invest Hg Saturn 3 A Institutional Venture Partners XV Institutional Venture Partners XVI Institutional Venture Partners XVII * Jade Equity Investors * Landmark Equity Partners XIV Landmark Equity Partners XV Landmark Equity Partners XVI * Lexington Capital PartnersVII Lexington Co-Investment Partners IV Lexington Co-Investment Partners V Lexington Co-Investment Partners V- Overage Lexington Middle Market Investors III Lexington Middle Market Investors IV Lightspeed Opportunity Fund Lightspeed Opportunity Fund II Lightspeed Vent Partners Select V Lightspeed Vent Partners XIV A Lightspeed Vent Partners XIV B Littlejohn Fund III † Littlejohn Fund IV Littlejohn Fund V Littlejohn Fund VI *

ALTERNATIVE INVESTMENTS RELATIONSHIP LISTING as of June 30, 2024

(continued)

	()	
Private Equity (continued)		
LLR Equity Partners IV	Orchid Asia VII	TDR Capital IV *
LLR Equity Partners V	Orchid Asia VIII	Thoma Bravo Fund XII
LLR Equity Partners VI	Pacific Equity Partners V	Thoma Bravo Fund XIII
Longitude Venture Partners II †	Pacific Equity Partners VI	Thoma Bravo Fund XIV
Longitude Venture Partners III †	PAG Asia Capital II	Thoma Bravo Fund XV *
Longitude Venture Partners IV	PAG Asia Capital III	Tiger Iron Old Line Fund †
Madison Dearborn Capital Partners V	Partners Group Emerging 2011	Tiger Iron Old Line Fund II †
Madison Dearborn Capital Partners VI	Partners Group Secondary 2008	Tiger Iron Old Line Fund III †
Madison Dearborn Capital Partners VII	Partners Group Secondary 2011	TPG Partners VI
Madison Dearborn Capital Partners VIII *	Partners Group Secondary 2015	TPG Partners VII
Maryland Innovation Opportunity Fund I	Point 406 Ventures Opportunities Fund †	Vista Equity Partners Fund IV
MBK Partners Fund III	Point 406 Ventures Opportunities Fund II †	Vista Equity Partners Fund V
MBK Partners Fund IV	Point 406 Ventures II †	Vista Equity Partners Fund VI
MBK Partners Fund V *	Point 406 Ventures III †	Vista Equity Partners Fund VII *
MD Asia Investors	Point 406 Ventures IV †	Vista Equity Partners Fund VIII *
MD Asia Investors II	Roark Capital Partners IV	Vista Foundation Fund II
MD Asia Investors III	Roark Capital Partners V *	Vista Foundation Fund III
MD Asia Investors IV	Silver Lake Partners V	Vista Foundation Fund IV *
Navis Asia Fund VI	Silver Lake Partners VI	Vistria Fund I †
New Mainstream Fund II †	Silver Lake Partners VII *	Vistria Fund II †
New Mainstream Fund III †	Spark Capital Growth Fund IV	Vistria Fund III †
New Mountain Partners III	Spark Capital VII	Vistria Fund IV
New Mountain Partners IV	TA Associates XI	Vistria Fund V
New Mountain Partners V	TA Associates XII	Wind Point Partners VII
New Mountain Partners VI	TA Associates XIII	Wind Point Partners VIII
North Sky CleanTech Fund IV	TA Associates XIV *	Wind Point Partners IX *
Orchid Asia V	TDR Capital III †	Wind Point Partners X
Orchid Asia VI		

Private Real Estate

Abacus Multi-Family Partners V Abacus Multi-Family Partners VI AEW Partners Fund IX * AEW Senior Housing Fund II AEW Senior Housing Fund IV Ares Industrial Real Estate Fund Asana Partners Fund III Brookfield Strategic Real Estate Partners IV Carmel Partners Investment Fund VII Carmel Partners Investment Fund VIII CBRE US Core Partners Clarion Lion Industrial Trust Clarion Lion Property Fund Europe Fund III Federal Capital Partners Fund II † Federal Capital Partners Fund III † FPA Core Plus Fund V FPA Core Plus Fund VI Frogmore Real Estate Partners II † GI Partners Fund IV Heitman America Real Estate Trust Heitman Value Partners V * JP Morgan Strategic Property JP Morgan Sunbelt Residential Development Fund LaSalle Property Fund Lone Star Real Estate Fund II Lone Star Real Estate Fund III Lone Star Real Estate Fund IV Lone Star Real Estate Fund V Lone Star Real Estate Fund V Lubert Adler Real Estate Fund VI Lubert Adler Real Estate Fund VI-A MetLife Core Property Fund Morgan Stanley Prime Property Fund North Haven Real Estate Fund X Global Rockwood Capital RE Partners Fund IX Scout Fund II † Starwood Hospitality Fund II Tristan Capital-European Special Opps 3 † Tristan Capital-European Special Opps 4 † Tristan Capital-European Special Opps 5 TruAmerica Workforce Housing Fund UBS Trumbull Property Fund Waterton Residential Property Venture XIII

ALTERNATIVE INVESTMENTS RELATIONSHIP LISTING as of June 30, 2024

Real Return

Alinda Infrastructure Fund II Brookfield Infrastructure Fund V DigitalBridge Partners III Domain Timber Investments † EIF US Power Fund IV Energy and Minerals Group V Energy and Minerals Group V-Accordion EQT Infrastructure VI First Reserve Fund XII First Reserve Fund XIII First Reserve Legacy Opportunities Fund

Absolute Return

Arctos Keystone Partners Arctos Sports Partners Fund II Aristeia Partners Aristeia Select Opportunities II ASP II Opportunities Avidity Capital Fund † Brevan Howard Alpha Strategies Brevan Howard FG Macro Fund BFAM Asian Opportunities Fund † Bridgewater All Weather Bridgewater Pure Alpha Clover Parallel

* denotes the presence of co-investment

† denotes Terra Maria Program

(continued)

- Global Infrastructure Partners V Global Timber Investors 9 Harvest Fund Advisors IFM Global Infrastructure Fund ISQ Global Infrastructure MD Global Infrastructure Natural Gas Partners IX Natural Gas Partners X Natural Gas Partners XI NGP Midstream & Resources
- Contrarian Emma 2 Empyrean Capital Fund † Exodus Point Hudson Bay Fund Hudson Bay Special Opportunities Fund ILS Property Casualty Fund II John Street Systematic Fund King Street Capital King Street Drawdown King Street Overflow Kirkoswald Global Macro Fund
- NGP Natural Resources XII Quantum Energy Partners V Quantum Energy Partners VI Quantum Energy Partners VII Rhumbline DJ Global Infrastructure Rhumbline Global Natural Resources RMS Forest Growth III † Stonepeak Opportunities Fund Tortoise Capital Advisors White Deer Energy †
- Lone Star Fund XI Petershill IV Petershill Private Equity Pharo Gaia Fund . PHM IV Co Investment Silver Lake Alpine II Standard General Fund II † Tiger Iron Old Line SPV Voloridge Voloridge Trading Aggressive Fund Yiheng Capital Partners †

FIXED INCOME RELATIONSHIP LISTING as of June 30, 2024

Dawson Portfolio Finance 5 *

Dawson Portfolio Finance 6

Credit/Debt Related

AG Potomac Fund
Alchemy Special Opps. Fund II
Alchemy Special Opps. Fund III
Apollo Credit Opps Fund III
Ares Credit Investment Partnership (MD)
Ares Sports, Media, and Entertainment Finance Fund
Berkshire Multifamily Debt III
Castlelake III
Castlelake IV
Castlelake V
Castlelake Aviation IV Stable Yield
Castlelake Aviation IV Stable Yield Opps.
Castlelake Aviation V Stable Yield
CB HS Aggregrator II
Charlesbank Credit Dislocation Overage Fund
Charlesbank Credit Opportunities Fund III
Crescent Capital Mezzanine Partners VI
CVI Credit Value Fund II
CVI Credit Value Fund III
CVI Credit Value Fund IV
CVI Credit Value Fund V
CVI Chesapeake Credit Opps A Fund
CVI Chesapeake Credit Opps B Fund
Dawson Portfolio Finance 3
Dawson Portfolio Finance 4

Dawson Partners Loch Raven EIG Energy Fund XV EIG Energy Fund XVI Falcon Strategic Partners III † Falcon Strategic Partners IV FP Credit Partners II FP Credit Partners III Gramercy Capital Solutions Fund III GraMex Investment Holdings GSO Credit Aha Fund II HarbourView Royalties Fund I † Hayfin Healthcare Opportunities Fund * HCR Potomac I HCR Potomac II HCRX Holdings Highbridge Convertible Dislocation Fund Highbridge Strategic Credit Fund II India Special Assets Fund III † Edelweiss India Special Assets Fund III KKR Mezzanine Partners I LCM Partners COPS 4 MD Cumberland Fund Merit Mezzanine Fund V

NHTV II Kyoto Co-Investor Oaktree European Principal Fund III Oaktree Opportunity Fund VIII Oaktree Opportunity Fund VIII-B OMR Sands I Orion Minerals Royalty Fund I Park Square Capital Partners II Partners Group European Mezzanine 2008 Peninsula Fund V Perella Weinberg Partners Prudential Capital Partners III Prudential Capital Partners IV Runway Growth Finance † Runway Growth Finance Opportunities Fund Shamrock Capital Content Fund II *† Shamrock Capital Content Fund III * Shoreline China Value Fund III † SLA Marcus Co-Invest TA Subordinated Debt Fund III Taurus Mining Finance II † Taurus Mining Royalty Fund Varde Fund X Tiverton AgriFinance III Waterfall Silver Spring Fund Wayzata Opportunities Fund III

Rate Sensitive

Garda Firvo

Voya MSR Opportunities Fund I

* denotes the presence of co-investment

† denotes Terra Maria Program

TERRA MARIA PROGRAM as of June 30, 2024

Terra Maria Program

Attucks Asset Management

Birch Run Investments Channing Global Advisors Ducenta Squared Asset Management Foresight Global Investors Globeflex Capital Isthmus Partners Lisanti Capital Growth LM Capital Group Longfellow Investment Management Loop Cap Asset Management New Century Advisors Pacific Ridge Capital Partners Paradigm Asset Management Phocas Financial Corp Profit Investment Management Promethos Capital Pugh Capital Management Inc Ramirez Asset Management Sky Harbor Capital Management Summit Creek Advisors

Xponance

Ballina Capital Castle Ark Management Hillsdale Investment Management Lizard Partners MAC Alpha Capital Management

Leading Edge Investment Advisors

Ativo Capital Management Frontier Global Partners Henry James International Management Inc Redwood Investments Strategic Global Advisors

Bold denotes Program Manager for the Terra Maria Program

INTERNALLY MANAGED ACCOUNTS as of June 30, 2024

Commodity Structural	MD Global Infrastructure	MD TIPS
Emerging Markets Structural Overlay/ Tactical	MD IG Corporate Bonds	MD US Large Cap Equity
Global Equity Tactical	MD International ex US Large Cap Equity	MD US Small Cap Equity
High Yield Tactical	MD International ex US Sci-Beta Value Equity	Natural Resource & Infrastractural Overlay
Inflation Sensitive FI Structural/ Tactical	MD Long Government Bonds	Nominal Fixed Income Structural/ Tactical
International Equity Structural/ Tactical	MD Securitized Bonds	US Equity Structural/ Tactical

EQUITY COMMISSIONS TO BROKERS for the Fiscal Year Ended June 30, 2024

Brokers (1)	Total Shares	Total Commission	Average Commission Per Share
Goldman Sachs	75,596	\$485	\$0.64
Citigroup Global Markets	73,807	441	0.60
Instinet	77,656	273	0.35
UBS Securities	176,376	235	0.13
CLSA	65,126	207	0.32
Morgan Stanley	38,060	168	0.44
B.Riley & Co. LLC	4,236	127	3.00
JP Morgan	61,578	104	0.17
Jefferies & Company	14,658	103	0.70
HSBC Securities	62,959	102	0.16
Other Broker Fees	214,126	1,511	0.71
Total Broker Commissions	864,178	\$3,756	\$0.43

(Expressed in Thousands)

(1) 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 Statement of Changes in Fiduciary Net Position. Other broker fees include 122 brokers each receiving less than \$100,000 in total commissions.

For the fiscal year ended June 30, 2024, total broker commissions averaged .43 cents per share.

LARGEST STOCK & BOND HOLDINGS AT MARKET as of June 30, 2024

		Fair
EQUITY SECURITIES:	Shares	Market Value
Nvidia Corp.	3,028,881	\$ 374,187,959
Microsoft Corporation	835,651	373,494,214
Apple Inc.	1,628,036	342,896,942
Amazon.Com Inc.	1,278,035	246,980,264
Meta Platforms Inc. Class A	252,325	127,227,312
Asml Holding NV	114,127	117,936,766
Alphabet Inc. Class A	644,014	117,307,150
Energy Transfer LP	7,003,437	113,595,748
Novo Nordisk A/S. Class B	732,937	105,924,154
Enbridge Inc.	2,725,008	96,924,134
Alphabet Inc. Class C	514,863	94,436,171
Targa Resources Corp.	668,896	86,140,427
Cheniere Energy Inc.	491,102	85,859,363
American Tower Corp.	432,710	84,110,170
Enterprise Products Partners	2,869,343	83,153,560

United States Treasury Inflation Linked, 0.625% 15 Jan 2026	\$ 205,827,280 \$	199,149,953
United States Treasury Inflation Linked, 0.375% 15 Jan 2027	201,166,750	191,320,581
United States Treasury Inflation Linked, 0.875% 15 Jan 2029	198,656,000	188,311,921
United States Treasury Inflation Linked, 0.5% 15 Jan 2028	189,376,020	178,505,393
United States Treasury Inflation Linked, 0.125% 15 Jan 2030	197,406,820	177,797,228
United States Treasury Bonds, 2.875% 15 May 2043	212,400,000	164,875,500
United States Treasury Inflation Linked, 1.125% 15 Jan 2033	176,711,392	163,530,518
United States Treasury Bonds, 3% 15 Nov 2044	196,000,000	153,063,750
United States Treasury Inflation Linked, 1.25% 15 Apr 2028	155,734,800	150,506,126
United States Treasury Inflation Linked, 2.125% 15 Apr 2029	125,683,920	125,951,490
United States Treasury Bonds, 2.5% 15 Feb 2045	166,890,000	119,013,431
United States Treasury Inflation Linked, 3.375% 15 Apr 2032	104,208,160	113,776,179
United States Treasury Inflation Linked, 1.375% 15 Feb 2044	121,066,200	103,781,162
United States Treasury Bonds, 3.25% 15 May 2042	121,010,000	100,608,470
United States Treasury Bonds, 3% 15 Aug 2052	132,670,000	99,813,445

A complete list of portfolio holdings is available upon request.

Fair Market Value

Par Value

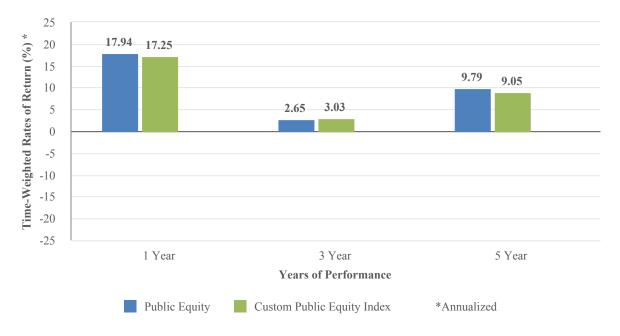
PUBLIC EQUITY 30.7% Real Assets 14.2% Natural **Resources &** Infrastructure Domestic Equity 14.2% 4.5% Real Estate 9.4% Commodities 0.3% Rate Sensitive 16.5% Int'I Developed **Emerging Market** Equity 8.1% Equity 4.9% Absolute Inflation-Return 5.8% Linked Credit/Debt Bonds Multi-**Strategies 8.9% Global Equity 3.6%** Fixed Income 13.2% 3.3% Asset 0.4%

INVESTMENT PORTFOLIO ALLOCATION as of June 30, 2024

- PUBLIC EQUITY 30.7%
- RATE SENSITIVE 16.5%
- ABSOLUTE RETURN 5.8%
- MULTI-ASSET 0.4%
- CREDIT/DEBT STRATEGIES 8.9%
- REAL ASSETS 14.2%

- PRIVATE EQUITY 21.7%
- CASH 1.8%

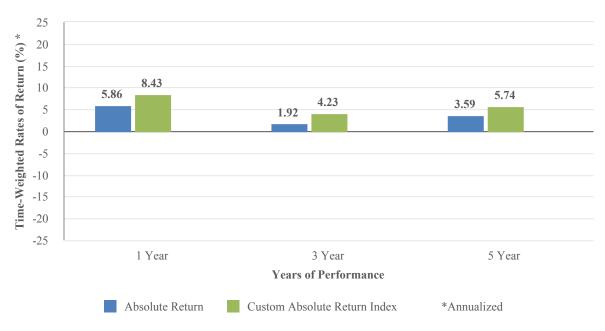




PUBLIC EQUITY

PRIVATE EQUITY

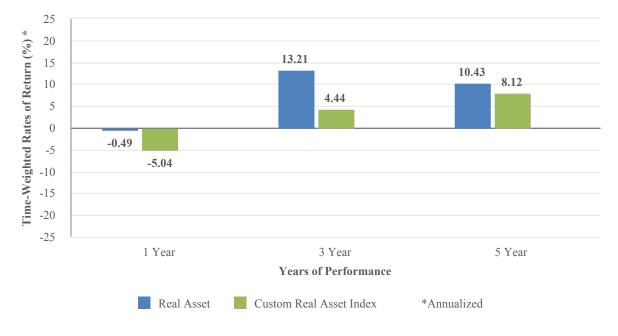




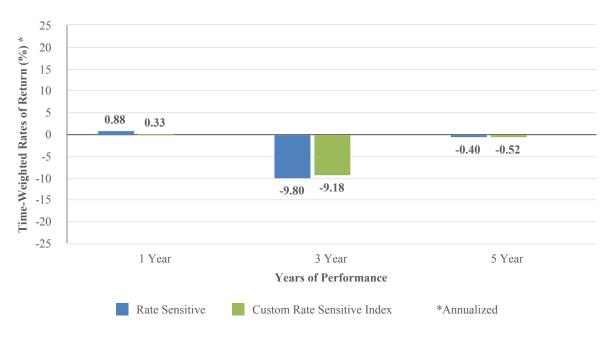
MARYLAND STATE RETIREMENT AND PENSION SYSTEM COMPARATIVE INVESTMENT RETURNS ENDING JUNE 30, 2024

ABSOLUTE RETURN

REAL ASSET

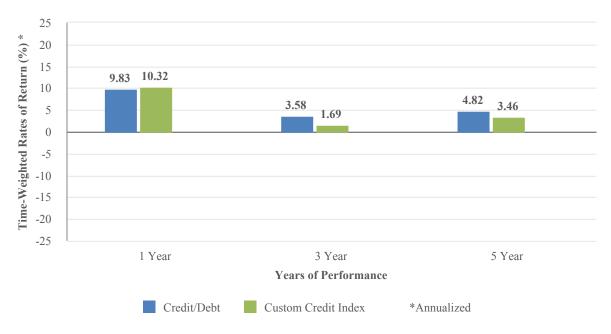






RATE SENSITIVE

CREDIT / DEBT

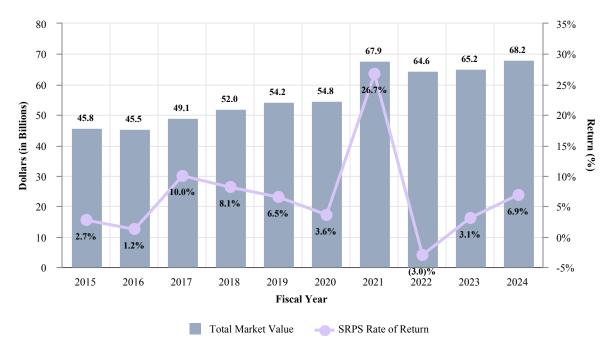


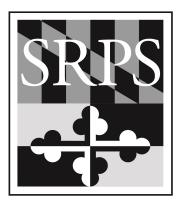


TOTAL PLAN

MARYLAND STATE RETIREMENT AND PENSION SYSTEM

TEN-YEAR HISTORY OF TIME-WEIGHTED ANNUAL RETURNS & GROWTH OF INVESTMENT PORTFOLIO





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November 22, 2024

Board of Trustees Maryland State Retirement and Pension System 120 East Baltimore Street, 16th Floor Baltimore, MD 21202

Dear Members of the Board:

The results of the *June 30, 2024 annual actuarial valuation* of the Maryland State Retirement and Pension System ("MSRPS") are presented in this report.

This report was prepared at your request and is intended for use by the Maryland State Retirement Agency ("SRA") and the Board of Trustees of the MSRPS and those designated or approved by the SRA or the Board. This report may be provided to other parties only in its entirety and only with the permission of the SRA or the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are as follows:

- Measure the financial position of MSRPS with regard to funding;
- Provide the Board with State and Participating Governmental Unit ("PGU") contribution rates for certification;
- Determine actuarial and statutory contribution rates;
- Discuss some of the risks associated with achieving the funding objectives of MSRPS; and
- Analyze the aggregate experience of the State Systems over the past year.

Information required by Statements No. 67 and No. 68 of the Governmental Accounting Standards Board ("GASB") for fiscal year 2024 is provided in a separate report.

The individual member data required for the valuations was furnished by the SRA, together with pertinent data on financial operations (unaudited). The cooperation and collaboration of SRA staff in furnishing these materials is acknowledged with appreciation. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the SRA.

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. The Board adopts these assumptions after considering the advice of the actuary and other professionals.

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

Board of Trustees Maryland State Retirement and Pension System November 22, 2024 Page 2

Each actuarial valuation considers all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. GRS performed an experience study of MSRPS for the period 2018-2023 after completion of the June 30, 2023 valuations. Assumptions from the experience study including investment return, inflation, COLA increases, mortality rates, retirement rates, withdrawal rates, disability rates, and rates of salary increase were adopted by the Board for first use in the June 30, 2024 valuation. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e., not significantly optimistic or pessimistic). All actuarial assumptions and methods used in the valuation follow the guidance in the applicable Actuarial Standards of Practice. Additional information about the actuarial assumptions is included in the section of this report entitled Actuarial Assumptions and Methods.

The computed contribution rates shown on page I-2 may be considered as minimum contribution rates that comply with the funding policy stated in the Statutes. Users of this report should be aware that contributions made at these rates do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the System in excess of those presented in this report be considered. This report includes risk metrics on pages II-17 and II-20 but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

The benefit provisions valued in the actuarial valuation as of June 30, 2024 are the same as the provisions from the last actuarial valuation as of June 30, 2023, except for the special death (in-service) benefit for Judges. Please see the top of page I-4 for more detail on the 2024 benefit provision changes. Portions of the savings from the 2011 pension reforms passed by the General Assembly are to be reinvested as additional contributions into the Systems. Legislation enacted in 2015 reduced the amount of reinvested savings to \$75 million per year beginning in fiscal year 2016 until the combined funded ratio of the Systems reaches 85% at which point the additional contributions cease. For fiscal year 2024, the legislature reduced the amount of reinvested savings by \$39.7 million. Due to the uncertain nature of future reinvested savings contributions, these additional contributions are no longer factored into the calculation of the contribution requirements of the State Systems.

We have assessed that the contribution rates calculated under the current funding policy are reasonable Actuarially Determined Employer Contributions (ADEC) and are consistent with the plan accumulating adequate assets to make benefit payments when due.

This valuation assumes the continuing ability of the employer to make the contributions necessary to fund this system. A determination regarding whether or not the employer is actually able to do so is outside our scope of expertise. Consequently, we did not perform such an analysis.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.



Board of Trustees Maryland State Retirement and Pension System November 22, 2024 Page 3

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The actuary did not perform an analysis of the potential range of such future measurements in this actuarial valuation report.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. 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 Code of Professional Conduct and applicable Actuarial Standards of Practice as promulgated by the Actuarial Standards Board.

This report should not be relied on for any purpose other than the purposes previously described. Determinations of the financial values associated with benefits described in this report for a purpose other than the intended purpose may produce results that differ significantly from those presented in this report.

The signing actuaries are independent of the plan sponsor.

This is one of multiple documents comprising the actuarial report. Other documents comprising the actuarial report include the PowerPoint presentation presented to the Board in October 2024 and separately to the Joint Committee on Pensions in November 2024. Not all of these documents have been issued as of this date.

Brad L. Armstrong and Jeffrey T. Tebeau are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Blad lee any

Brad L. Armstrong, ASA, EA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA





INTRODUCTION

The funding valuation report presents the results of the June 30, 2024 annual actuarial valuation of the Maryland State Retirement and Pension System (MSRPS). The purposes of the annual funding valuations are as follows:

- · Measure the financial position of MSRPS with regard to funding,
- Provide the Board with State and Participating Governmental Unit ("PGU") contribution rates for certification,
- Determine actuarial and statutory contribution rates,
- · Discuss some of the risks associated with achieving the funding objectives of MSRPS, and
- Analyze the aggregate experience of the State Systems over the past year.

A summary of the primary funding valuation results as of June 30, 2024 is presented on the following page.

The Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 valuation report presents the results of the June 30, 2024 annual accounting valuation of the Maryland State Retirement and Pension System (MSRPS). The purpose of the annual accounting valuations is as follows:

• Provide actuarial reporting and disclosure information for the MSRPS and State's financial report.

The accounting valuation results for the year ended June 30, 2024 are presented in a separate report.

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. The most recent analysis of the System's experience was performed in 2024 and new assumptions were adopted for the June 30, 2024 valuation. 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, 2024:

- A rate of return on investments of 6.80% compounded annually (effective June 30, 2021);
- projected salary increases of 3.00% compounded annually, attributable to wage inflation (effective June 30, 2024);
- additional projected salary increases ranging from 0.00% to 19.50% per year attributable to seniority and merit (effective June 30, 2024);
- post-retirement benefit increases ranging from 2.13% to 3.00% per year depending on the system for service earned prior to July 1, 2011, and 1.40% to 3.00% per year depending on the system for service earned on or after July 1, 2011 (effective June 30, 2024);
- rates of mortality, termination of service, disablement and retirement based on actual experience during the period from June 30, 2018 through June 30, 2023 (effective June 30, 2014); and
- an increase in the aggregate active member payroll of 3.00% annually (effective June 30, 2024).

SUMMARY OF VALUATION RESULTS JUNE 30, 2024 (\$ IN MILLIONS) (STATE AND MUNICIPAL)

				2024						2023	
	TCS	ECS (1)	State Police	Judges	L	EOPS (2)	С	ORS (3)	Total	Total	% Change
A. Demographic Information											
1. Active Number Counts	115,316	84,948	1,312	322		2,993		153	205,044	198,647	3.2%
2. Active Payroll	\$ 9,102	\$ 6,064	\$ 145	\$ 61	\$	267	\$	11	\$ 15,651	\$ 14,385	8.8%
3. Retired Number Counts	84,975	85,408	2,638	471		2,608		71	176,171	174,609	0.9%
4. Annual Benefits for Retired Members(4)	\$ 2,847	\$ 1,855	\$ 167	\$ 49	\$	106	\$	2	\$ 5,027	\$ 4,802	4.7%
5. Deferred / Inactive Number Counts	23,494	22,202	85	8		309		1	46,099	47,087	(2.1)%
6. Total Number Counts	223,785	192,558	4,035	801		5,910		225	427,314	420,343	1.7%
B. Assets											
1. Market Value(MV)	41,120	22,656	1,949	609		1,531		43	67,908	64,893	4.6%
2. Rate of return on MV(5)									6.88 %	3.11 %	
3. Actuarial Value (AV)	42,593	23,456	2,018	631		1,584		45	70,327	67,985	3.4%
4. Rate of Return on AV									5.56 %	5.51 %	
5. Ratio of AV to MV									103.60 %	104.80 %	
C. Actuarial Results											
1. Normal Cost as a % of Payroll	12.09 %	11.06 %	38.93 %	39.85 %		25.81 %		14.89 %	12.02 %	12.02 %	
2. Actuarial Accrued Liability (AAL)											
a. Active	\$ 24,129	\$ 11,983	\$ 749	\$ 226	\$	840	\$	27	\$ 37,954	\$ 34,635	9.6%
b. Retired	29,942	20,531	2,325	530		1,461		33	54,822	52,720	4.0%
c. Deferred/Inactive	1,614	1,314	17	8		48		1	3,002	2,964	1.3%
d. Total	\$ 55,685	\$ 33,828	\$ 3,091	\$ 764	\$	2,349	\$	61	\$ 95,778	\$ 90,319	6.0%
3. Unfunded AAL (UAAL)	\$ 13,091	\$ 10,372	\$ 1,073	\$ 133	\$	764	\$	15	\$ 25,448	\$ 22,334	13.9%
4. Funded Ratio	76.49 %	69.34 %	65.29 %	82.59 %		67.43 %		73.77 %	73.43 %	75.27 %	
D. Contribution Rates(6)				STAT	E P	ORTION	ONL	Ŋ			

Di Contribution Hutes(c)								
		FY 2025	FY 2024					
	TCS	ECS	State Police	Judges	LEOPS	Total	Total	Total
1. Pension Contributions								
a. Employer Normal Cost	5.09 %	4.74 %	31.07 %	32.92 %	19.02 %	5.52 %	5.27 %	5.34 %
b. Member Contribution Rate	7.00 %	6.75 %	7.86 %	6.93 %	6.92 %	6.93 %	6.93 %	6.93 %
c. UAAL Contribution Rate	12.47 %	17.13 %	63.74 %	18.71 %	28.01 %	14.71 %	13.88 %	12.54 %
d. Total	24.56 %	28.62 %	102.67 %	58.56 %	53.95 %	27.16 %	26.08 %	24.81 %
2.Total Actuarial Employer Rate (1.a + 1.c)	17.56 %	21.87 %	94.81 %	51.63 %	47.03 %	20.23 %	19.15 %	17.88 %
3. Total Employer Budgeted Rate								
a. Employer Budgeted Rate	17.56 %	21.87 %	94.81 %	51.63 %	47.03 %	20.23 %	19.15 %	17.88 %
b. Reinvested Saving Rate	- %	- %	- %	0.00 %	- %	- %	0.59 %	0.64 %
c. Total Employer Budgeted Rate	17.56 %	21.87 %	94.81 %	51.63 %	47.03 %	20.23 %	19.74 %	18.52 %

(1) Includes ECS State, ECS Municipal, and CORS State.

(2) Includes LEOPS State and LEOPS Municipal.

(3) Includes CORS Municipal only.

(4) Retiree benefit amounts include the cost-of-living adjustment granted July, 2024 and July 1, 2023, respectively.

(5) Actuarial estimation method used is expected to produce results that differ modestly from figures reported by the System.

(6) Contribution rates shown in the "Total" column are for informational purposes only and are not used for funding purposes.

Total may not add due to rounding

ACTUARY'S COMMENTS

For the year ended June 30, 2024, the System's assets earned 6.88% based on our estimate and 6.93% as reported by the System (using a slightly different computation method) on a market value basis and 5.56% on a smoothed or actuarial value basis. The smoothed rate of return was less than the 6.80% assumed rate of investment return for fiscal year 2024. There were recognized asset losses from fiscal years 2020, 2022, and 2023 which were partially offset by recognized asset gains from fiscal years 2021 and 2024 in the actuarial value of assets as of June 30, 2024. This resulted in a loss under the asset smoothing method.

UAAL and Actuarial Gain/(Loss) (\$ in Millions)

	Municipal	State	SRPS
Unfunded Actuarial Accrued Liability (UAAL) as of June 30, 2023	\$ 1,333 \$	5 21,001	\$ 22,334
Expected UAAL as of June 30, 2024 before changes	1,313	20,682	21,995
Changes in benefit provisions	—		—
Changes in methods and assumptions	106	914	1,020
Expected UAAL as of June 30, 2024 after changes	1,419	21,596	23,015
Actual UAAL as of June 30, 2024	1,633	23,816	25,449
Net actuarial gain/(loss)	(214)	(2,220)	(2,434)
Actuarial gain/(loss) by source	(72)		
Actuarial investment experience	(73)	(763)	(836)
Actuarial accrued liability experience	(141)	(1,457)	(1,598)

Totals may not add due to rounding

In relative terms, the overall System funded ratio of actuarial value of assets to liabilities decreased from 75.27% in 2023 to 73.43% this year. If market value of assets were the basis for the measurements, the funded ratio would have decreased from 71.85% to 70.91%.

The market value of assets exceeds the retiree liabilities by about 24% in total (or 3% if accumulated member contributions of about \$11.5 billion are netted out), which increased slightly from 23% last year. This is referred to as a short condition test and is demonstrated in the chart at the bottom of this page. It is looking at the current retiree liabilities as the benefits that will be paid the soonest since these benefits are already in pay status. Active liabilities and deferred vested liabilities do not have associated immediate cash flow requirements. Although the market value of assets exceeds the current retiree liabilities in total, this is not true for all of the systems individually. For State Police, the market value of assets is less than the retiree liabilities.

Summary of Contribution Rates by State System (\$ in Millions)														
State														
		TCS		ECS		Police		Judges	I	EOPS	(CORPS		Total
Market Value of Assets (MVA)	\$	41,120	\$	22,656	\$	1,949	\$	609	\$	1,531	\$	43	\$	67,908
Retiree Liability		29,942		20,531		2,325		530		1,461		33		54,822
MVA as % of Retiree Liability		137%		110%		84%		115%		105%		130%		124%
Excluding Member Contributions		112%		92%		79%		107%		93%		113%		103%

Total

In 2024, the General Assembly passed legislation creating a special death benefit for members of the Judges' Retirement System. The legislation increased the actuarial accrued liability by \$70 thousand and the Employer Contribution Rate increased by 0.18% of pay.

The General Assembly passed legislation in 2023 that amends how the unfunded liabilities of the System are amortized. The existing unfunded liability as of June 30, 2023 for each State System will continue to be amortized over a single closed 25-year period beginning July 1, 2014 and ending June 30, 2039 (14 years remaining as of the June 30, 2024 valuation, which determines the fiscal year 2026 contribution). Beginning July 1, 2023 (first affecting the 2024 valuation), any new unfunded liabilities or surpluses that accrued during the preceding fiscal year are amortized over closed periods according to the following guidelines:

- Over 15 years for experience gains and losses;
- Over 25 years for gains or losses attributable to changes to actuarial assumptions or methods;
- Over a period ranging from no less than 10 and no more than 15 years for gains or losses stemming from new legislation (except early retirement incentives); and
- Over 5 years for any accrued liability stemming from legislation providing incentives for the early retirement of State employees.

The actuarially determined rates are equal to the employer normal cost plus the Unfunded Actuarial Accrued Liability (UAAL) contribution rate. The unfunded actuarial contribution rate is equal to the payment resulting from amortizing the unfunded liability as a level percentage of pay over various time periods depending on the source of the UAAL.

The fiscal year 2026 budgeted rates for the State Systems are equal to the actuarially determined rate. Due to the uncertain nature of future reinvested savings contributions, these additional contributions are no longer factored into the calculation of the contribution requirements of the State Systems. It is our understanding that the Retirement Agency will monitor contributions to ensure that the System receives the proper amount of reinvested dollar savings during fiscal year 2026 (if any).

The schedules required under Government Accounting Standards Board (GASB) Statements No. 67 (beginning with fiscal year 2014) and No. 68 (beginning with fiscal year 2015) are provided in a separate report.

History of Recent Changes

In 2011, the General Assembly enacted pension reforms which were effective July 1, 2011, and affected both current actives and new hires. The member contribution rate was increased for members of the Teachers' Pension System and Employees' Pension System from 5% to 7%. The member contribution rate was increased from 4% to 7% for LEOPS. In addition, the benefit attributable to service on or after July 1, 2011 is subject to cost-of-living adjustments (COLAs) that are based on the increase in the Consumer Price Index and capped at 2.5% or 1.0%. The cap is 2.5% if the market value investment return from the preceding calendar year was higher than the investment return assumption used in the previous valuation (6.80%) and in effect as of December 31 of the preceding fiscal year, and 1.0% otherwise. There were also reforms that affected only those members hired on or after July 1, 2011.

In addition to the benefit provision changes in 2011, a portion of the savings from the pension reforms is to be reinvested in certain State Systems (TCS, ECS, State Police, and LEOPS). The allocation of reinvested savings by System is in proportion to the savings from the pension reforms as measured in the actuarial valuation as of June 30, 2011. Reinvested savings of \$191 million was contributed in fiscal year 2013. Legislation enacted in 2014 changed the amount of reinvested savings from \$300 million each year beginning in fiscal year 2014 to \$100 million each year for fiscal years 2014 and 2015, \$150 million for fiscal year 2016, \$200 million for fiscal year 2017, \$250 million for fiscal year 2018, \$300 million each year beginning in fiscal year 2017, \$250 million for fiscal year 2015 further reduced the amount of reinvested savings to \$75 million per year beginning in fiscal year 2016 until the combined funded ratio of the Systems reaches 85% at which point the reinvestment ceases. For fiscal year 2024, the legislature reduced the amount of reinvested savings by \$39.7 million.

Beginning in fiscal year 2012, employers pay a per-member fee to cover the Retirement Agency's operating expenses (i.e., administrative expenses). The State pays the fee for libraries.

Beginning in fiscal year 2013, local employers contributed toward the normal cost for the Teachers Combined System. The required portion of normal cost contribution amounts for local employers for fiscal years 2013 through 2016 was defined by the Maryland statutes. Beginning in fiscal year 2017, local employers contribute the full normal cost contribution on behalf of their employees.

In the 2013 legislative session, the Legislature changed the method used to fund the State Systems of the MSRPS. The unfunded liability for each State System was being amortized over a single closed 25-year period ending June 30, 2039. In addition, the corridor method used by the Teachers' Combined System and the State portion of the Employees' Combined System, which was established in 2001, was being phased-out over a 10-year period. In 2015, the Legislature removed the corridor funding method effective with the June 30, 2015 valuation.

The Teachers' Combined System (TCS) remained out of the corridor since the June 30, 2005 valuation and the State portion of the Employees Combined System (ECS) remained out of the corridor since the June 30, 2004 valuation resulting in contribution rates for TCS and ECS that were less than actuarial rates. With the elimination of the corridor effective with the June 30, 2015 valuation report, TCS and ECS began to contribute based on the actuarially determined rate beginning in fiscal year 2017.

OTHER OBSERVATIONS

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected System Contributions and Funded Status

Given the System's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the System earning 6.80% on the actuarial value of assets), it is expected that:

- 1. The employer normal cost as a percentage of pay will decrease to the level of the Reformed Benefit Plan's (i.e., plans for members hired after July 1, 2011) normal cost as time passes and the active population is comprised entirely of Reformed Plan members;
- 2. The unfunded actuarial accrued liabilities will be fully amortized according to the current amortization schedule (June 30, 2051, after the unfunded liability from assumption changes is fully amortized); and
- 3. The funded status of the plan will increase gradually towards a 100% funded ratio.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the Actuarial Accrued Liability and the actuarial value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

- 1. The measurement is inappropriate for assessing the sufficiency of System assets to cover the estimated cost of settling the System's benefit obligations; for example, transferring the liability to an unrelated third party in a free market type transaction.
- 2. The measurement is dependent upon the actuarial cost method which, in combination with the System's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100% is not synonymous with no required future contributions. If the funded status were 100%, the System would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).
- 3. The measurement would produce a different result if the market value of assets were used instead of the actuarial value of assets, unless the market value of assets is used in the measurement.

PRIOR YEAR ASSET EXPERIENCE

Assets (State and Municipal)

Plan assets for this System are measured on both a market value and an actuarial or smoothed value basis. The actuarial smoothing method, described again on page Appendix A-16, annually recognizes 20% of the difference between (a) the expected investment return if the market value of assets had earned the assumed rate of 6.80% during FY 2024, and (b) the actual investment return. Bear in mind that the expected return for this purpose is based on the assumed return from the prior year's actuarial valuation. In addition, there is a market value collar that constrains the actuarial value to be within 20% of the market value of assets. In periods of high returns, this method defers the amount of asset gains above the assumed return. Conversely, in periods of returns below the assumed rate, recognition of the losses is deferred. This method limits the effect of temporary asset value fluctuations on contribution rates. The System does not immediately feel the full impact of lower (or higher) costs when asset values fluctuate dramatically.

For the year ended June 30, 2024, the System's assets earned 6.88% based on our estimate and 6.93% as reported by the System (using a slightly different computation method) on a market value basis and 5.56% on an actuarial value basis. The System experienced an investment gain of \$0.1 billion on a market value basis and a loss of \$0.8 billion on an actuarial basis. More detail can be found in Section III. Reconciliations of market value and actuarial value of assets are presented below:

Item (In Millions)	Ma	rket Value	Actuarial Valu			
June 30, 2023 Value	\$	64,893	\$	67,985		
Employer Contributions		2,618		2,618		
Member Contributions		1,056		1,056		
Benefit Payments and Other Disbursements		(5,075)		(5,075)		
Expected Investment Earnings (6.80% 2024)		4,366		4,576		
Expected Value June 30, 2024	\$	67,859	\$	71,161		
Investment Gain/(Loss)		51		(836)		
June 30, 2024 Value	\$	67,910	\$	70,325		
Figures may not add exactly due to rounding						

The 2021 valuation recognized 40% of the investment gain from FY 2021 in the determination of the actuarial value of assets rather than the 20% normally recognized. The remaining 60% will be recognized equally over the next four valuations (15% was recognized in 2022, 2023, and 2024).

(STATE AND MUNICIPAL) TRENDS (STATE AND MUNICIPAL)

One of the best ways to measure or evaluate the financial condition of a pension plan is to examine the historical trends that are evolving. Below are three charts which illustrate trend information from 2000 through the end of 2024, on the System's assets and liabilities, annual cash flows in and out of the fund, and the State contribution rate. Our comments on each follow.

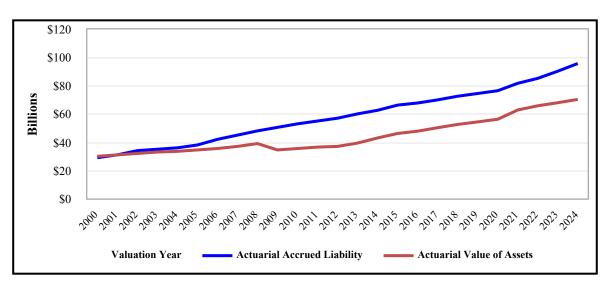
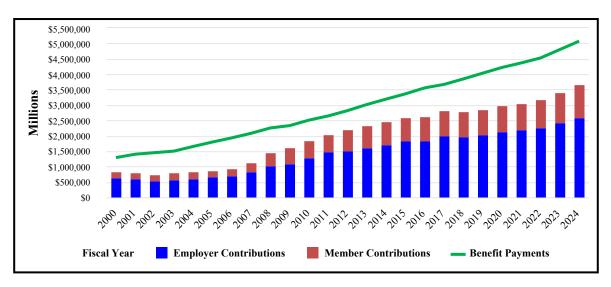


Chart A: Assets/Liabilities

Chart B: Benefits vs. Contributions



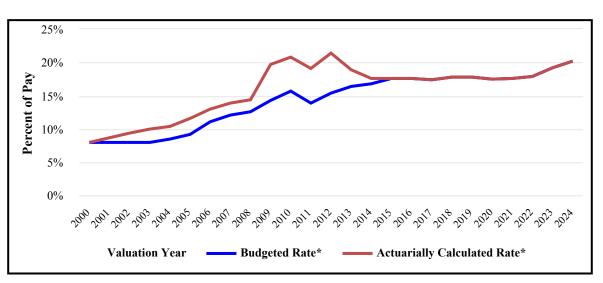


Chart C: State Contributions Rate

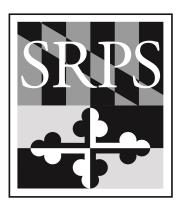
Chart A displays a comparison of the actuarial value of assets and the Actuarial Accrued Liability (AAL). The difference between the actuarial value of assets and the AAL is the Unfunded Actuarial Accrued Liability. The Unfunded Actuarial Accrued Liability is about \$25 billion as of June 30, 2024, and increased by about \$3.1 billion since the last valuation as of June 30, 2023. As of June 30, 2024, the actuarial value of assets under the five-year asset smoothing method is 104% of the market value of assets, compared with 105% as of June 30, 2023.

Chart B presents non-investment cash flow trend information that can have investment implications. With the aging and retirements of the baby boom generation, MSRPS has seen increases in payments to retirees. This is expected for mature retirement systems such as MSRPS. Benefit payments, which are the total amount below the green line, exceeds the total contributions, which is the total amount below the top of the red bar. The amount needed to pay the excess of benefit payments over total contributions comes from either investment return or liquidation of current assets. If the difference between the total benefit payments and total contributions increases, a larger portion of investment return will be needed to pay benefits and may require a change in asset allocation. The corridor method increased the extent of negative cash flows. The corridor funding method was eliminated first effective with the June 30, 2015 valuation. The budgeted rates have been equal to the actuarial rates since fiscal year 2017.

Finally, Chart C looks at the composite actuarially determined and budgeted State contribution rates. The budgeted contribution rates by System determine the fiscal year State appropriation. It shows how the rate has increased since the year 2000, after years of sustained investment gains in the 1990s. Effective with the 2001 valuation, the State appropriations were performed under a corridor funding method for the two largest plans, TCS and ECS. The appropriation remained essentially level for a few years before increasing with the 2004 valuation. Legislation enacted in 2015 removed the corridor funding method for TCS and ECS beginning with the valuation as of June 30, 2015. The budgeted rate is now equal to the actuarial rate for TCS and ECS.

Chart C further illustrates that the corridor method consistently acted to reduce the State's contributions calculated in valuations between 2001 and 2015.

^(*) Excludes reinvested savings in valuation years 2010. 2010 rates are prior to the 2011 GA Reforms.



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SUMMARY OF UNFUNDED ACTUARIAL (STATE AND

	A	ctuarial Liabilities F	or			
Valuation Date June 30,	Active member Contributions	member Term Vested E		Total Liabilities	Actuarial Value of Assets	
2015	\$ 5,908,597,531	\$ 40,321,760,550	\$ 20,051,422,798	\$ 66,281,780,879	\$ 46,170,624,066	
2016	6,437,712,138	41,640,894,712	19,703,317,255	67,781,924,105	47,803,679,296	
2017	7,023,662,251	43,117,075,812	19,845,837,454	69,986,575,517	50,250,464,717	
2018	7,557,858,673	45,341,184,229	19,675,645,860	72,574,688,762	52,586,527,740	
2019	8,142,516,497	46,654,221,664	19,729,262,120	74,526,000,281	54,361,969,141	
2020	8,770,367,300	47,732,961,164	19,967,706,953	76,471,035,417	56,246,893,989	
2021	9,460,950,720	50,302,226,715	21,975,379,589	81,738,557,024	62,817,937,925	
2022	10,012,448,913	52,876,516,715	22,359,098,000	85,248,063,628	65,798,923,071	
2023	10,651,550,595	55,684,454,730	23,983,363,675	90,319,369,000	67,985,366,365	
2024	11,505,319,079	57,822,804,075	26,446,793,092	95,774,916,246	70,325,764,439	

SUMMARY OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS (STATE AND MUNICIPAL)

Fiscal	Add	ed to Rolls	Remov	Removed from Rolls Rolls-End of Year % Increase				% Increase	Average
Year Ended	Number	Annual Allowance	Number	Annual Allowances	Number		Annual Allowances	in Annual Allowances	Annual Allowance
2015	8,459	\$ 239,724,802	3,496	\$ 64,129,306	147,850	\$	3,323,248,159	5.58%	\$ 22,477
2016	8,243	201,205,015	3,527	75,486,723	152,566		3,448,966,451	3.78%	22,606
2017	7,384	211,608,686	3,584	73,321,980	156,366		3,587,253,157	4.01%	22,941
2018	8,105	268,295,042	4,097	64,344,782	160,374		3,791,203,417	5.69%	23,640
2019	7,484	260,126,211	2,966	69,487,028	164,892		3,981,842,600	5.03%	24,148
2020	7,150	262,737,304	4,398	103,943,419	167,644		4,140,636,485	3.99%	24,699
2021	6,813	234,688,805	5,089	111,489,084	169,368		4,263,836,206	2.98%	25,175
2022	7,700	365,253,216	4,833	112,312,265	172,235		4,516,777,157	5.93%	26,225
2023	7,123	410,007,580	4,749	124,948,682	174,609		4,801,836,055	6.31%	27,501
2024	6,412	351,904,178	4,850	127,014,420	176,171		5,026,725,813	4.68%	28,533

Notes: Members added to rolls were estimated based on a retirement date/change date after June 30, 2023.

Annual allowances added to rolls include COLA increases for continuing members.

COLA increases were estimated based on the benefits for the continuing members.

LIABILITIES / SOLVENCY TEST MUNICIPAL)

Ratio of A	Assets to Actuaria	al Liabilities		Unfunded		
Active Member Contributions	Retirees Term Vested and Inactives	Active Members Employer Fin. Portion	Funded Ratio (Assets/Liab. Coverage)	Actuarial Accrued Liability (UAAL)	Covered Payroll	UAAL as % of Covered Payroll
100.00%	99.85 %	0.00 %	69.66 %	\$ 20,111,156,813	\$ 11,063,961,664	182 %
100.00%	99.34 %	0.00 %	70.53 %	19,978,244,809	11,155,923,517	179 %
100.00%	100.00 %	0.55 %	71.80 %	19,736,110,800	11,418,973,317	173 %
100.00%	99.31 %	0.00 %	72.46 %	19,988,161,022	11,566,219,797	173 %
100.00%	99.07 %	0.00 %	72.94 %	20,164,031,140	11,905,463,225	169 %
100.00%	99.46 %	0.00 %	73.55 %	20,224,141,428	12,501,422,207	162 %
100.00%	100.00 %	13.90 %	76.85 %	18,920,619,099	12,749,246,637	148 %
100.00%	100.00 %	13.01 %	77.19 %	19,449,140,557	13,201,815,232	147 %
100.00%	100.00 %	6.88 %	75.27 %	22,334,002,635	14,384,588,957	155 %
100.00%	100.00 %	3.77 %	73.43 %	25,449,151,807	15,650,353,463	163 %

MARYLAND STATE RETIREMENT ACCOUNTING STATEMENT AS OF (STATE AND

	Teachers' Combined System	Employees' Combined System
1. Actuarial Accrued Liability:		
a. Employee Contributions	\$ 7,468,905,020 \$	3,702,120,096
b. Retirees, Term. Vesteds & Inactives	31,555,382,517	21,844,852,793
c. Active Members	 16,659,700,470	8,280,488,854
2. Total Actuarial Accrued Liability (1(a) + 1(b) + 1(c))	\$ 55,683,988,007 \$	33,827,461,743
3. Actuarial Value of Assets	 42,592,549,276	23,455,564,314
4. Unfunded Actuarial Accrued Liability: (2-3)	\$ 13,091,438,731 \$	10,371,897,429
5. Funded Ratio	76.49%	69.34%
6. Annual Payroll	\$ 9,102,349,400 \$	6,063,840,512
7. UAAL as % of Payroll	144%	171%

AND PENSION SYSTEM INFORMATION June 30, 2024 MUNICIPAL)

State Police	Judges	LEOPS	CORS	Total MSRPS
\$ 120,149,949	\$ 40,713,352	\$ 167,760,075	\$ 5,670,588	\$ 11,505,319,080
2,342,302,046	537,937,021	1,508,990,478	33,339,222	57,822,804,077
 628,905,203	 184,820,378	 671,924,032	 20,954,154	 26,446,793,091
\$ 3,091,357,198	\$ 763,470,751	\$ 2,348,674,585	\$ 59,963,964	\$ 95,774,916,248
 2,017,984,559	 630,597,234	 1,584,310,438	 44,758,619	 70,325,764,440
\$ 1,073,372,639	\$ 132,873,517	\$ 764,364,147	\$ 15,205,345	\$ 25,449,151,808
65.28%	82.60%	67.46%	74.64%	73.43%
\$ 145,026,245	\$ 61,180,934	\$ 267,415,396	\$ 10,540,976	\$ 15,650,353,463
740%	217%	286%	144%	163%

REPORT OF THE ACTUARY ON THE VALUATION OF THE
TEACHERS' COMBINED SYSTEM OF THE STATE OF MARYLAND
Summary of Principal Plan Results

		n Performed				
		June 30, 2024		June 30, 2023		
		(for FY2026)		(for FY2025)	% Change	
A. Demographic Information						
Active Number Count		115,316		112,773	2.3%	
Retired Member and Beneficiary Count		84,975		84,177	0.9%	
Vested Former Member Count		23,494		23,702	(0.9)%	
Total Number Count		223,785		220,652	1.4%	
Active Payroll	\$	9,102,349,400	\$	8,468,611,549	7.5%	
Annual Benefits for Retired Members	\$	2,847,358,849	\$	2,727,122,841	4.4%	
B. Actuarial Results						
Actuarial Accrued Liability	\$	55,683,988,007	\$	52,448,153,716	6.2%	
Actuarial Value of Assets		42,592,549,276		41,303,062,250	3.1%	
Unfunded Actuarial Accrued Liability (UAAL)	\$	13,091,438,731	\$	11,145,091,466	17.5%	
Funded Ratio		76.49%		78.75%		
C. Contribution Rates						
Employer Normal Cost Rate		5.09%		4.96%		
UAAL Amortization Rate		12.47%		11.29%		
Total Actuarial Employer Contribution Rate		17.56%		16.25%		

REPORT OF THE ACTUARY ON THE VALUATION OF THE EMPLOYEES' COMBINED SYSTEM OF THE STATE OF MARYLAND (STATE AND MUNICIPAL) Summary of Principal Plan Results

Actuarial Valuation Performed June 30, 2024 June 30, 2023 (for FY2026) (for FY2025) % Change A. Demographic Information 84,948 Active Number Count 81,181 4.6% 0.7% Retired Member and Beneficiary Count 85,408 84,783 Vested Former Member Count 22,202 22,968 -3.3% 1.9% Total Number Count 192,558 188,932 Active Payroll \$ 10.9% 6,063,840,512 \$ 5,465,772,792 Annual Benefits for Retired Members \$ 4.8% 1,854,825,715 \$ 1,769,707,983 **B.** Actuarial Results (State and Municipal) Actuarial Accrued Liability \$ 33,827,461,743 \$ 32,015,510,582 5.7% Actuarial Value of Assets 3.8% 23,455,564,314 22,606,668,114 Unfunded Actuarial Accrued Liability (UAAL) 10,371,897,429 9,408,842,468 10.2% \$ \$ Funded Ratio 69.34% 70.61% C. Contribution Rates (State Portion Only) Employer Normal Cost Rate 4.74% 4.36% UAAL Amortization Rate 17.13% 16.77% Total Actuarial Employer Contribution Rate 21.87% 21.13%

REPORT OF THE ACTUARY ON THE VALUATION OF THE STATE POLICE RETIREMENT SYSTEM OF THE STATE OF MARYLAND

Summary of Principal Plan Results										
		June 30, 2024 (for FY2026)		June 30, 2023 (for FY2025)	% Change					
A. Demographic Information										
Active Number Count		1,312		1,335	-1.7%					
Retired Member and Beneficiary Count		2,638		2,606	1.2%					
Vested Former Member Count		85		88	-3.4%					
Total Number Count		4,035		4,029	0.1%					
Active Payroll	\$	145,026,245	\$	139,457,997	4.0%					
Annual Benefits for Retired Members	\$	167,342,110	\$	157,847,047	6.0%					
B. Actuarial Results										
Actuarial Accrued Liability	\$	3,091,357,198	\$	2,903,831,814	6.5%					
Actuarial Value of Assets		2,017,984,559		1,938,797,497	4.1%					
Unfunded Actuarial Accrued Liability (UAAL)	\$	1,073,372,639	\$	965,034,317	11.2%					
Funded Ratio		65.28%		66.77%						
C. Contribution Rates										
Employer Normal Cost Rate		31.07%		26.98%						
UAAL Amortization Rate		63.74%		58.53%						
Total Actuarial Employer Contribution Rate		94.81%		85.51%						

REPORT OF THE ACTUARY ON THE VALUATION OF THE PENSION PLAN OF JUDGES AND THEIR SURVIVING SPOUSES

Summary of Principal Plan Results									
		June 30, 2024 (for FY2026)		June 30, 2023 (for FY2025)	% Change				
A. Demographic Information									
Active Number Count		322		326	-1.2%				
Retired Member and Beneficiary Count		471		468	0.6%				
Vested Former Member Count		8		8	-%				
Total Number Count		801		802	-0.1%				
Active Payroll	\$	61,180,934	\$	58,695,840	4.2%				
Annual Benefits for Retired Members	\$	48,619,393	\$	45,729,800	6.3%				
B. Actuarial Results									
Actuarial Accrued Liability	\$	763,470,751	\$	714,654,082	6.8%				
Actuarial Value of Assets		630,597,234		612,814,007	2.9%				
Unfunded Actuarial Accrued Liability (UAAL)	\$	132,873,517	\$	101,840,075	30.5%				
Funded Ratio		82.60%		85.75%					
C. Contribution Rates									
Employer Normal Cost Rate		32.92%		32.33%					
UAAL Amortization Rate		18.71%		14.89%					
Total Actuarial Employer Contribution Rate		51.63%		47.22%					

REPORT OF THE ACTUARY ON THE VALUATION OF THE LAW ENFORCEMENT OFFICERS' PENSION SYSTEM OF THE STATE OF MARYLAND (STATE AND MUNICIPAL)

	June 30, 2024 (for FY2026)	June 30, 2023 (for FY2025)	% Change
A. Demographic Information			
Active Number Count	2,993	2,877	4.0%
Retired Member and Beneficiary Count	2,608	2,512	3.8%
Vested Former Member Count	 309	 313	-1.3%
Total Number Count	 5,910	 5,702	3.6%
Active Payroll	\$ 267,415,396	\$ 241,937,328	10.5%
Annual Benefits for Retired Members	\$ 106,271,092	\$ 99,483,793	6.8%
B. Actuarial Results (State and Municipal)			
Actuarial Accrued Liability	\$ 2,348,674,585	\$ 2,182,666,901	7.6%
Actuarial Value of Assets	1,584,310,438	1,481,154,062	7.0%
Unfunded Actuarial Accrued Liability (UAAL)	\$ 764,364,147	\$ 701,512,839	9.0%
Funded Ratio	67.46%	67.86%	
C. Contribution Rates (State Portion Only)			
Employer Normal Cost Rate	19.02%	18.29%	
UAAL Amortization Rate	 28.01%	 27.71%	
Total Actuarial Employer Contribution Rate	47.03%	46.00%	

REPORT OF THE ACTUARY ON THE VALUATION OF THE CORRECTIONAL OFFICERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND (MUNICIPAL)

Summary of Principal Plan Results									
		June 30, 2024 (for FY2026)		June 30, 2023 (for FY2025)	% Change				
A. Demographic Information									
Active Number Count		153		155	-1.3%				
Retired Member and Beneficiary Count		71		63	12.7%				
Vested Former Member Count		1		8	(87.5)%				
Total Number Count		225		226	-0.4%				
Active Payroll	\$	10,540,976	\$	10,113,451	4.2%				
Annual Benefits for Retired Members	\$	2,308,653	\$	1,944,590	18.7%				
B. Actuarial Results									
Actuarial Accrued Liability	\$	59,963,964	\$	54,551,907	9.9%				
Actuarial Value of Assets		44,758,619		42,870,436	4.4%				
Unfunded Actuarial Accrued Liability (UAAL)	\$	15,205,345	\$	11,681,471	30.2%				
Funded Ratio		74.64%		78.59%					

SCHEDULE OF ACTIVE MEMBERSHIP VALUATION DATA BY PLAN

		Teachers' Retiremen	t	
Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
2015	986	\$91,396,562	\$92,694	1.65%
2016	724	68,494,031	94,605	2.06
2017	537	51,836,368	96,530	2.03
2018	418	41,497,070	99,275	2.84
2019	334	33,972,615	101,714	2.46
2020	261	27,675,932	106,038	4.25
2021	199	21,792,460	109,510	3.27
2022	150	17,154,423	114,363	4.43
2023	112	13,928,467	124,361	8.74
2024	91	12,175,569	133,797	7.59

Teachers' Retirement

Teachers' Pension

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
2015	104,540	\$6,379,309,714	\$61,023	1.67%
2016	104,823	6,542,543,808	62,415	2.28
2017	105,765	6,729,001,984	63,622	1.93
2018	106,428	6,899,599,531	64,829	1.90
2019	107,448	7,119,090,819	66,256	2.20
2020	109,336	7,464,789,165	68,274	3.05
2021	109,759	7,667,053,899	69,854	2.31
2022	110,830	7,940,620,230	71,647	2.57
2023	111,792	8,454,683,082	75,629	5.56
2024	115,225	9,090,173,831	78,891	4.31

SCHEDULE OF ACTIVE MEMBERSHIP VALUATION DATA BY PLAN (continued)

Employees' Retirement (State and Municipal)					
Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay	
2015	8,566	\$429,223,262	\$50,108	3.31%	
2016	7,923	395,490,050	49,917	-0.38	
2017	7,632	389,389,294	51,021	2.21	
2018	7,725	397,640,605	51,475	0.89	
2019	8,119	419,453,514	51,663	0.37	
2020	8,032	434,681,795	54,119	4.75	
2021	7,968	436,295,102	54,756	1.18	
2022	7,777	450,844,451	57,972	5.87	
2023	8,124	518,552,837	63,830	10.10	
2024	8,201	550,821,349	67,165	5.22	

Employees' Pension

(State and Municipal)

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
2015	75,228	\$3,871,524,469	\$51,464	3.29%
2016	74,702	3,849,843,225	51,536	0.14
2017	74,455	3,929,663,604	52,779	2.41
2018	73,483	3,903,606,885	53,123	0.65
2019	73,098	3,990,487,247	54,591	2.76
2020	73,624	4,203,514,950	57,094	4.59
2021	71,886	4,245,570,424	59,060	3.44
2022	70,919	4,393,913,408	61,957	4.91
2023	73,057	4,947,219,955	67,717	9.30
2024	76,747	5,513,019,163	71,834	6.08

Judges' Retirement

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
2015	307	\$44,612,624	\$145,318	3.37%
2016	298	44,711,221	150,038	3.25
2017	312	46,875,642	150,242	0.14
2018	316	47,498,152	150,311	0.05
2019	315	48,934,800	155,349	3.35
2020	324	51,882,186	160,130	3.08
2021	315	52,073,208	165,312	3.24
2022	317	53,934,013	170,139	2.92
2023	326	58,695,840	180,049	5.82
2024	322	61,180,934	190,003	5.53

SCHEDULE OF ACTIVE MEMBERSHIP VALUATION DATA BY PLAN

State 1 blief Rethement				
Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
2015	1,394	\$91,049,875	\$65,316	3.01%
2016	1,402	93,490,648	66,684	2.09
2017	1,371	100,384,047	73,220	9.80
2018	1,347	100,324,842	74,480	1.72
2019	1,364	106,977,874	78,430	5.30
2020	1,391	116,274,059	83,590	6.58
2021	1,353	119,048,457	87,989	5.26
2022	1,356	124,367,251	91,716	4.24
2023	1,333	139,457,997	104,620	14.07
2024	1,312	145,026,245	110,538	5.66

(continued) State Police Retirement

Law Enforcement Officers' Pension

(STATE AND MONOTAL)				
Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
2015	2,488	\$151,955,067	\$61,075	4.15%
2016	2,529	156,396,298	61,841	1.25
2017	2,574	166,560,857	64,709	4.64
2018	2,617	170,555,081	65,172	0.72
2019	2,683	180,963,077	67,448	3.49
2020	2,748	194,666,790	70,839	5.03
2021	2,697	199,460,447	73,956	4.40
2022	2,736	213,002,711	77,852	5.27
2023	2,874	241,937,328	84,181	8.13
2024	2,993	267,415,396	89,347	6.14

(STATE AND MUNICIPAL)

SCHEDULE OF ACTIVE MEMBERSHIP VALUATION DATA BY PLAN (continued)

Correctional Officers' Retirement System									
		(MUNICIPAL)							
Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay					
2015	91	\$4,890,091	\$53,737	4.15%					
2016	93	4,954,236	53,271	-0.87					
2017	96	5,261,521	54,808	2.89					
2018	97	5,497,631	56,677	3.41					
2019	97	5,583,279	57,560	1.56					
2020	135	7,937,330	58,795	2.15					
2021	134	7,952,640	59,348	0.94					
2022	125	7,978,745	63,830	7.55					
2023	155	10,113,451	65,248	2.22					
2024	153	10,540,976	68,895	5.59					



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STATISTICAL SECTION OVERVIEW

The Maryland State Retirement and Pension System (MSRPS) has implemented GASB Statement 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements relative to the supplementary information provided in this section in an effort to improve the understandability and usefulness of the information presented. GASB Statement 44 further states that the purpose of the Statistical Section is to provide historical perspective, context, and detail to assist readers in using the information in the financial statements and the notes to the financial statements to better understand and assess the System's overall economic condition. The schedules within the Statistical Section are classified into the following four categories: Financial Trends, Revenue Capacity, Demographic and Economic Information, and Operating Information.

The schedules beginning on page 147 show financial trend information to assist users in understanding and assessing how the MSRPS's financial position has changed over the past 10 years. The financial trend schedules presented are:

- Changes in Plan Net Position
- Benefits Expense by Type
- Refund Expense by Type

The schedules beginning on page 148 show demographic and economic information and operating information. The demographic and economic information is intended to assist users in understanding the environment in which MSRPS operates. The operating information is intended to provide contextual information about MSRPS's operations to assist readers in using financial statement information. The demographic and economic information and the operating information presented include:

- Schedule of Average Benefit Payments
- History of Funding Progress
- Contribution Rates by Plan
- Schedule of Retired Members by Type
- Schedule of Active Membership by Plan
- Schedule of Retirees and Beneficiaries by Plan
- Revenues by Source and Expenses by Type
- Revenues vs. Expenses
- Principal Participating Employers

TEN-YEAR HISTORY OF CHANGES IN PLAN NET POSITION

for the Years Ended June 30,

(Expressed in thousands)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Additions										
Employer contributions	\$ 1,858,612	\$ 1,870,655	\$ 2,033,312	\$ 1,995,017	\$ 2,054,093	\$ 2,144,269	\$ 2,203,523	\$ 2,282,303	\$ 2,438,917	\$ 2,618,316
Members contributions	755,444	764,414	782,689	791,582	807,290	850,298	865,740	894,267	963,702	1,056,173
Net Investment income	1,197,671	497,531	4,473,443	3,899,393	3,288,207	1,866,641	14,315,762	(1,942,133)	1,980,277	4,416,775
Total Additions	3,811,727	3,132,600	7,289,444	6,685,992	6,149,590	4,861,208	17,385,025	1,234,437	5,382,896	8,091,264
Deductions										
Benefit payments	3,121,823	3,284,550	3,469,493	3,577,123	3,744,132	3,926,220	4,108,492	4,233,047	4,394,350	4,916,425
Refunds	42,922	48,245	58,362	63,441	68,600	67,400	68,752	64,774	91,535	107,308
Administrative expenses	26,130	29,080	28,659	30,904	33,211	39,784	41,346	48,740	42,061	50,796
Total Deductions	3,190,875	3,361,875	3,556,514	3,671,468	3,845,943	4,033,404	4,218,590	4,346,561	4,527,946	5,074,529
Changes in Plan Net Positions	\$ 620,852	\$ (229,275)	\$ 3,732,930	\$ 3,014,524	\$ 2,303,647	\$ 827,804	\$13,166,435	\$(3,112,124)	\$ 854,950	\$ 3,016,735

SCHEDULE OF BENEFIT EXPENSE BY TYPE

(Expressed In Thousands)

			Death In Service Pre-		Disability Benefits		
Fiscal	Age & Serv	vice Benefits	Retirement	Reti	rees		
Year	Retirees	Survivors	Benefits	Accidental	Ordinary	Survivors	Total
2015	2,777,136	130,215	21,005	124,090	211,373	20,731	3,284,550
2016	2,937,077	138,467	21,592	128,518	221,849	21,990	3,469,493
2017	3,028,182	145,322	21,522	130,309	229,143	22,644	3,577,122
2018	3,175,588	152,066	21,655	133,671	237,539	23,612	3,744,131
2019	3,334,495	161,203	21,720	138,313	245,429	25,059	3,926,219
2020	3,496,003	171,010	22,494	141,504	250,956	26,526	4,108,493
2021	3,622,725	180,283	23,242	144,625	254,621	27,551	4,253,047
2022	3,748,807	191,749	24,944	146,436	253,859	28,555	4,394,350
2023	3,974,624	209,238	26,003	153,156	259,732	30,410	4,653,163
2024	4,207,308	223,188	26,698	159,285	267,306	32,640	4,916,425

SCHEDULE OF REFUND EXPENSE BY TYPE

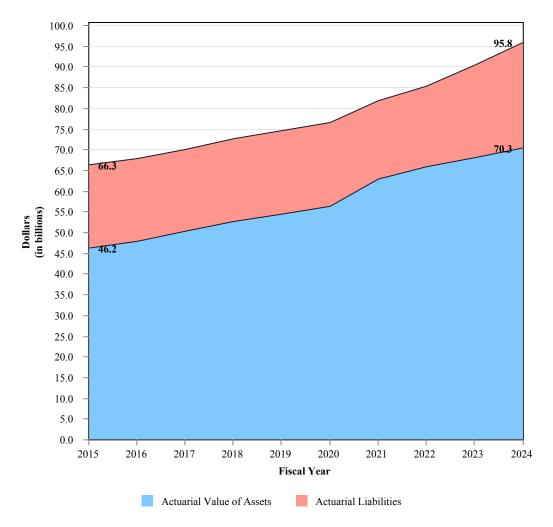
(*Expressed in thousands*)

Fiscal				
Year	Separation	Death	Misc.	Total
2015	\$40,966	\$7,126	\$153	\$48,245
2016	51,372	6,869	120	58,361
2017	54,671	8,538	238	63,447
2018	59,108	9,315	177	68,600
2019	58,848	8,394	158	67,400
2020	59,871	8,804	77	68,752
2021	53,004	11,665	105	64,774
2022	74,654	16,753	128	91,535
2023	88,143	13,493	101	101,737
2024	89,638	17,537	133	107,308

MARYLAND STATE RETIREMENT AND PENSION SYSTEM TEN YEAR HISTORY OF AVERAGE BENEFIT PAYMENTS

		0 - 5		5 - 10		10 - 15		15 - 20		20 - 25		25 - 30		30+
Period 7/1/2014 to 6/30/2015	٩		¢	150	¢	000	¢	1 20 4	¢	1 00 4	٩	0.075	¢	2.246
Average monthly benefit	\$	454	\$	459	\$ ¢	888	\$	1,304	\$	1,804	\$	2,275	\$	3,246
Monthly final average salary	\$	2,338	\$	3,515	\$	4,139	\$	4,139	\$	5,124	\$	5,571	\$	6,134
Number of retired members		201		911		972		1,089		968		1,042		2,621
Period 7/1/2015 to 6/30/2016														
Average monthly benefit	\$	501	\$	472	\$	869	\$	1,367	\$	1,901	\$	2,366	\$	3,377
Monthly final average salary	\$	2,371	\$	3,407	\$	4,128	\$	4,773	\$	5,427	\$	5,786	\$	6,425
Number of retired members		219		918		934		1,118		953		1,016		2,423
Period 7/1/2016 to 6/30/2017														
Average monthly benefit	\$	576	\$	509	\$	864	\$	1,400	\$	1,943	\$	2,454	\$	3,479
Monthly final average salary	\$	2,199	\$	3,626	\$	4,110	\$	4,865	\$	5,389	\$	5,855	\$	6,563
Number of retired members		138		748		873		1,028		964		863		2,060
Period 7/1/2017 to 6/30/2018														
Average monthly benefit	\$	279	\$	520	\$	938	\$	1,476	\$	1,982	\$	2,626	\$	3,526
Monthly final average salary	\$	3,012	\$	3,482	\$	4,290	\$	4,934	\$	5,457	\$	6,046	\$	6,584
Number of retired members		87		704		925		1,200		1,084		964		2,428
Period 7/1/2018 to 6/30/2019														
Average monthly benefit	\$	311	\$	508	\$	950	\$	1,510	\$	2,028	\$	2,678	\$	3,597
Monthly final average salary	\$	3,082	\$	3,360	\$	4,243	\$	4,916	\$	5,460	\$	6,034	\$	6,580
Number of retired members		109		816		956		1,213		1,086		967		2,439
Period 7/1/2019 to 6/30/2020														
Average monthly benefit	\$	487	\$	512	\$	940	\$	1,549	\$	2,049	\$	2,819	\$	3,639
Monthly final average salary	\$	3,400	\$	3,639	\$	4,441	\$	5,170	\$	5,651	\$	6,431	\$	6,800
Number of retired members		42		531		830		1,023		962		840		2,151
Period 7/1/2020 to 6/30/2021														
Average monthly benefit	\$	604	\$	489	\$	947	\$	1,521	\$	2,099	\$	3,005	\$	3,772
Monthly final average salary	\$	3,856	\$	3,660	\$	4,428	\$	5,181	\$	5,699	\$	6,626	\$	6,987
Number of retired members		45		410		845		976		995		823		1,901
Period 7/1/2021 to 6/30/2022														
Average monthly benefit	\$	632	\$	567	\$	1,031	\$	1,591	\$	2,162	\$	3,039	\$	3,954
Monthly final average salary	\$	3,992		3,667		4,625		5,345		5,795		6,711		7,239
Number of retired members		61		480		890		1,181		1,226		900		2,066
Period 7/1/2022 to 6/30/2023														
Average monthly benefit	\$	494	\$	522	\$	1,026	\$	1,623	\$	2,238	\$	3,177	\$	4,237
Monthly final average salary	\$	3,373	\$	3,916	\$	4,851	\$	5,473	\$	6,000	\$	6,962	\$	7,697
Number of retired members		31		489		784		1,056		1,152		851		1,922
Period 7/1/2023 to 6/30/2024														
Average monthly benefit	\$	628	\$	479	\$	1,006	\$	1,728	\$	2,425	\$	3,368	\$	4,415
Monthly final average salary	\$	4,006	\$	3,770	\$	4,977	\$	5,840	\$	6,390	\$	7,211	\$	7,921
Number of retired members	•	37		1.1.1.1	-	J	-) - ·	-	,- · »	~	, -		1,617

Years Credited Service



TEN-YEAR HISTORY OF FUNDING PROGRESS

TEN-YEAR HISTORY OF EMPLOYER CONTRIBUTION RATES BY PLAN

			State				Participating	Governmenta	Units (PGU)
Fiscal Year	Combined State Rate	Teachers' Combined Rate	Employees' Combined Rate	Judges' Retirement	State Police Retirement	Law Enforcement Officers' Pension	Law Enforcement Officers' Pension	Employees' Combined Rate	Correctional Officers' Retirement
2015	16.41%	15.47%	15.53%	42.74%	83.06%	41.37%	30.45%	6.20%	11.43%
2016	16.83	15.71	16.38	40.70	78.91	39.77	31.94	5.00	10.43
2017	17.58	15.79	18.28	46.56	81.40	39.60	31.18	4.64	9.81
2018	17.60	15.71	18.56	46.45	80.29	39.69	30.75	5.03	9.53
2019	17.42	15.43	18.58	44.53	78.41	39.78	31.43	5.47	9.85
2020	17.82	15.59	19.56	44.44	79.58	41.37	32.22	5.85	10.26
2021	17.85	14.96	20.71	40.27	78.09	42.96	34.93	6.71	9.67
2022	17.50	14.67	20.50	41.92	75.30	42.28	34.21	7.04	11.06
2023	17.55	14.65	20.68	40.02	76.45	44.73	36.20	7.40	12.19
2024	17.88	14.86	21.13	43.00	78.68	45.89	36.91	7.79	11.87

SCHEDULE OF RETIRED MEMBERS BY TYPE

as of June 30, 2024

			Type of Retirement							
Amour Monthly I		Number of Retirees	NR (1) & ER(2)	SP(3)	SPD(4)	ADR(5)	ODR(6)	SPDR(7)	MAX	
1-	300	17,077	15,827	891	12	2	178	167	9,902	
301-	600	15,295	13,122	1,088	24	5	715	341	7,803	
601-	900	13,399	10,982	984	78	13	1,019	323	6,248	
901-	1,200	12,652	9,981	917	73	39	1,352	290	5,685	
1,201-	1,500	11,840	9,450	849	75	84	1,153	229	5,017	
1,501-	1,800	11,251	8,844	854	73	190	1,093	197	4,574	
1,801-	2,100	10,835	8,659	718	71	242	1,009	136	4,171	
2,101-	2,400	9,979	8,124	611	63	269	829	83	3,758	
2,401-	2,700	9,338	7,619	524	54	330	751	60	3,555	
2,701-	3,000	8,506	7,043	435	59	333	586	50	3,241	
Ov	ver 3,000	55,999	49,043	1,990	307	2,182	2,319	158	23,791	
		176,171	148,694	9,861	889	3,689	11,004	2,034	77,745	

Type of Retirement:

- 1 Normal retirement for age and service
- 2 Early retirement
- 3 Survivor payment normal or early retirement
- 4 Survivor payment death in service
- 5 Accidental disability retirement
- 6 Ordinary disability retirement
- 7 Survivor payment disability retirement

_				#Option S	Selected		
	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 5	Opt. 6	Opt. 7
	3,150	1,679	625	612	680	425	4
	2,367	1,770	1,070	813	765	701	6
	1,820	1,664	1,141	1,009	686	829	2
	1,460	1,558	1,264	1,085	634	963	3
	1,363	1,524	1,194	1,090	732	919	1
	1,178	1,641	1,152	1,030	772	900	4
	1,260	1,540	1,156	1,064	720	923	1
	1,115	1,494	1,058	1,050	624	880	-
	1,036	1,422	975	910	586	851	3
	916	1,224	873	925	557	769	1
	4,821	7,257	5,634	7,339	2,581	4,548	28
	20,486	22,773	16,142	16,927	9,337	12,708	53

OF RETIREMENT AND OPTION SELECTED

Option Selected:

- Basic The standard benefit if no option is selected. Generally, at retiree's death, all payments cease. However, the basic allowance for the State Police, Law Enforcement Offices (LEOPS), Judges and Legislators provides a continuing benefit for spouses or children under 18.
- Opt. 1 Guarantees return of the present value of the retirement benefit less the total payments already paid to the member.
- Opt. 2 Guarantees the same payment to the designated beneficiaries for their lifetime.
- Opt. 3 Guarantees one half the member's payment to the designated beneficiaries for their lifetime.
- Opt. 4 Guarantees return of the member's accumulated contributions and interest less the member's accumulated reserves already paid.
- Opt. 5 Guarantees the same payment to the designated beneficiaries for their lifetime, unless the beneficiaries predecease the respective members. Allowance then increases to the basic.
- Opt. 6 Guarantees one half the member's payment to the designated beneficiaries for their lifetime, unless the beneficiaries predecease the respective members. Allowance then increases to the basic.
- Opt. 7 Special option calculation performed by actuary.

Fiscal Year	Total	Teachers' Retirement	Teachers' Pension	Employees' Retirement*	Employees' Pension	Judges' Retirement	State Police Retirement	Law Enforcement Officers' Pension	Local Correctional Officers' Retirement
2015	246,369	1,372	128,695	9,370	102,270	315	1,475	2,781	91
2016	246,062	1,051	129,794	8,749	101,760	305	1,486	2,823	94
2017	246,370	805	130,990	8,409	101,415	321	1,461	2,869	100
2018	244,732	617	131,417	8,481	99,425	325	1,446	2,922	99
2019	243,704	487	131,769	8,887	97,691	323	1,453	2,994	100
2020	244,753	380	133,243	8,782	97,343	332	1,478	3,054	141
2021	242,362	300	133,391	8,750	95,029	322	1,439	2,990	141
2022	241,713	235	134,357	8,527	93,661	327	1,442	3,031	133
2023	245,729	188	136,287	8,872	95,272	334	1,423	3,190	163
2024	251,143	152	138,658	8,944	98,206	330	1,397	3,302	154

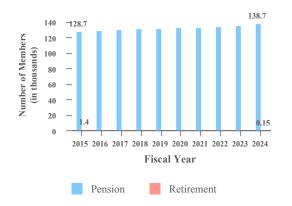
TEN-YEAR HISTORY OF ACTIVE MEMBERSHIP BY PLAN

Note: Includes vested former members. *Includes members of the Maryland General Assembly and State correctional officers.

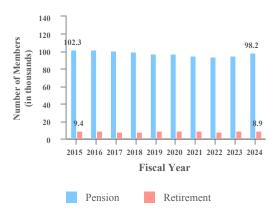


TOTAL SYSTEM ACTIVE MEMBERSHIP

ACTIVE MEMBERSHIP IN TEACHERS' PLANS



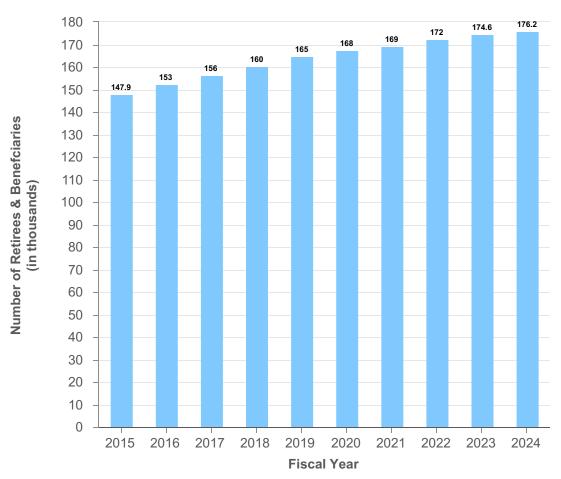
ACTIVE MEMBERSHIP IN EMPLOYEES' PLANS



Fiscal Year	Total	Teachers' Retirement	Teachers' Pension	Employees' Retirement*	Employees' Pension	Judges' Retirement	State Police Retirement	Law Enforcement Officers' Pension	Correctional Officers' Retirement System
2015	147,850	28,131	43,045	21,571	50,460	397	2,508	1,711	27
2016	152,566	27,552	46,030	21,172	53,039	407	2,536	1,801	29
2017	156,366	26,762	48,747	20,734	55,206	417	2,572	1,896	32
2018	160,374	25,764	51,437	20,340	57,947	421	2,477	1,954	34
2019	164,892	24,822	54,329	19,955	60,757	431	2,505	2,053	40
2020	167,644	23,858	56,581	19,464	62,583	441	2,517	2,153	47
2021	169,368	22,790	58,725	18,832	63,705	442	2,559	2,264	51
2022	172,235	21,904	60,980	18,382	65,463	463	2,597	2,393	53
2023	174,609	20,960	63,217	17,994	66,789	468	2,606	2,512	63
2024	176,171	20,007	64,968	17,624	67,784	471	2,638	2,608	71

TEN-YEAR HISTORY OF RETIREES AND BENEFICIARIES BY PLAN

(*) Includes members of the Maryland General Assembly and correctional officers.



TOTAL SYSTEM RETIREES AND BENEFICIARIES

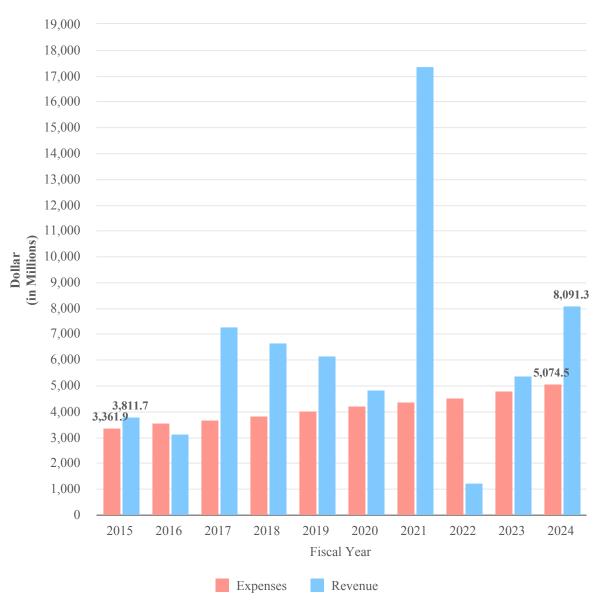
TEN-YEAR HISTORY OF REVENUES BY SOURCE AND EXPENSES BY TYPE

(Expressed in Thousands)

			REVENUES			
Fiscal Year	Members' Contributions	Employers' and Other Contributions	Annual Covered Payroll	Employers' and Other Contributions as a Percent of Covered Payroll	Net Investment Income/Loss	Total Revenue
2015	\$755,444	\$1,858,612	\$11,063,961	16.80%	\$1,197,671	\$3,811,727
2016	764,414	1,870,655	11,155,924	16.77	497,531	3,132,600
2017	782,689	2,033,312	11,418,974	17.81	4,473,443	7,289,444
2018	791,582	1,995,017	11,566,222	17.25	3,899,393	6,685,992
2019	807,290	2,054,093	11,905,463	17.25	3,288,207	6,149,590
2020	850,298	2,144,269	12,501,422	17.15	1,866,641	4,861,208
2021	865,740	2,203,523	12,749,246	17.28	14,315,762	17,385,025
2022	894,267	2,282,303	13,201,816	17.29	(1,942,133)	1,234,437
2023	963,702	2,438,917	14,384,589	16.96	1,980,277	5,382,896
2024	1,056,173	2,618,316	15,650,353	16.73	4,416,775	8,091,264

EXPENSES

Fiscal		Administrative		
Year	Benefits	Expenses	Refunds	Total
2015	\$3,284,550	\$29,080	\$48,245	\$3,361,875
2016	3,469,493	28,659	58,362	3,556,514
2017	3,577,123	30,904	63,441	3,671,468
2018	3,744,132	33,211	68,600	3,845,943
2019	3,926,220	39,784	67,400	4,033,404
2020	4,108,492	41,346	68,752	4,218,590
2021	4,253,047	48,740	64,774	4,366,561
2022	4,394,350	42,061	91,535	4,527,946
2023	4,653,163	46,014	101,737	4,800,914
2024	4,916,425	50,796	107,308	5,074,529



TEN-YEAR HISTORY OF REVENUES VS. EXPENSES

PRINCIPAL PARTICIPATING EMPLOYERS CURRENT YEAR AND TEN YEARS AGO

		2024		2014			
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System	
Participating Government							
State of Maryland	373,125	1	87%	339,790	1	87%	
All other (Participating Municipalities)	54,189	2	13%	48,752	2	13%	
Total System	427,314			388,542			

Governmental Units Participating in the Systems

as of June 30, 2024

Allegany Community College Allegany County Board of Education Allegany County Government Allegany County Library Allegany County Transit Authority Annapolis, City of Anne Arundel Community College Anne Arundel County Board of Education Baltimore Metropolitan Council Berlin, Town of Berwyn Heights, Town of Bladensburg, Town of Bowie, City of Brentwood, Town of Brunswick, City of Calvert County Board of Education Cambridge, City of Cambridge Housing Authority Caroline County Board of Education Caroline County Sheriff Deputies Carroll County Board of Education Carroll County Public Library Carroll Soil Conservation District Catoctin & Frederick County Soil Conservation District Cecil County Board of Education Cecil County Government Cecil County Library Centreville, Town of Chesapeake Bay Commission Chestertown, Town of Cheverly, Town of College of Southern Maryland College Park, City of Crisfield, City of Crisfield Housing Authority Cumberland, City of Cumberland, City of -Police Department Denton, Town of District Heights, City of Dorchester County Board of Education Dorchester County Government Dorchester County Roads Board Dorchester County Sanitary Commission Eastern Shore Regional Library Edmonston, Town of

Elkton, Town of Emmitsburg, Town of Federalsburg, Town of Frederick County Board of Education Frostburg, City of Fruitland, City of Garrett County Board of Education Garrett County/Western Maryland Health Planning Council Garrett County Community Action Committee Garrett County Roads Board Greenbelt, City of Greensboro, Town of Hagerstown, City of Hagerstown Community College Hampstead, Town of Harford County Board of Education Harford County Community College Harford County Government Harford County Library Harford County Liquor Board Howard Community College Howard County Board of Education Howard County Community Action Committee Hurlock, Town of Hyattsville, City of Kent County Board of Education Kent County Government Kent Soil And Water Conservation District Landover Hills, Town of LaPlata, Town of Manchester, Town of Maryland Health & Higher Educational Facilities Authority Middletown, Town of Montgomery College Morningside, Town of Mount Airy, Town of Mount Rainier, City of New Carrollton, City of North Beach, Town of Northeast Maryland Waste Disposal Authority Oakland, Town of Oxford, Town of Pocomoke, City of Preston, Town of Prince Georges Community College

Prince Georges County Board of Education Prince Georges County Crossing Guards Prince Georges County Government Prince Georges County Memorial Library Princess Anne, Town of Queen Anne's County Board of Education Queen Anne's County Government Queenstown, Town of Ridgely, Town of Rockhall, Town of Salisbury, City of Shore Up! Snow Hill, Town of Somerset County Board of Education Somerset County Government Somerset County Economic Development Commission Somerset County Sanitary District, Inc. Southern MD Tri-County Community Action Committee St. Mary's County Board of Education St. Mary's County Government St. Mary's County Housing Authority St. Mary's County Metropolitan Commission St. Michaels, Town of Sykesville, Town of Takoma Park, City of Talbot County Board of Education Talbot County Government Taneytown, Town of Thurmont, City of Tri-County Council For Lower Eastern Shore Tri-County Council For Western Maryland University Park, Town of Upper Marlboro, Town of Walkersville, Town of Washington County Board of Education Washington County Liquor Board Washington County Library Westminster, City of Worcester County Board of Education Worcester County Government Worcester County Liquor Control Board Wor-Wic Community College

*Withdrawn Governmental Units

Anne Arundel County Economic Opportunity Commission

Housing Authority of Cumberland

*List reflects withdrawn governmental units with a withdrawal liability balance.



This guide provides a general summary of certain features of the Maryland State Retirement and Pension System ("MSRPS"). The MSRPS is governed by law, including Division II of the State Personnel and Pensions Article of the Annotated Code of Maryland, and Title 22 of the Code of Maryland Regulations. If there is a conflict between the law and this guide, the law prevails.

CITATIONS

All citations "SPP" are to the State Personnel and Pensions Article of the Annotated Code of Maryland.

Teachers' Retirement System

A COMPOSITE PICTURE					
		2024		2023	
Total Membership					
Active Vested		91		112	
Active Non-Vested		0		0	
Vested Former Members		61		76	
Retired Members		20,007	20,960		
Active Members					
Number		91		112	
Average Age		74.4		73.1	
Average Years of Service		48.2		47.1	
Average Annual Salary	\$	133,797	\$	124,361	
Retirees & Beneficiaries					
Number		20,007		20,960	
Average Age		80.9		80.4	
Average Monthly Benefit	\$	4,241	\$	4,044	

1. Membership

System closed to new members hired on or after January 1, 1980. Members on December 31, 1979 continue to be members unless they elected to transfer into the Teachers' Pension System (established January 1, 1980) prior to January 1, 2005.

Membership generally includes any teacher, helping teacher, principal, supervisor, superintendent, attendance officer or clerk employed in public day school within the State of Maryland, or supported and controlled by the State; any librarian or clerical employee of a library established or operated under the Education Article; any professional or clerical employee of a community college established or operated under the Education Article; or staff employee of the University System of Maryland, Morgan State University or St. Mary's College who is a member as of January 1, 1998.

2. Member Contributions

Retirement System members participate under one of three elections (effective July 1, 1984):

- Plan A: Generally 7% of earnable compensation to maintain all benefits, including unlimited compounded cost-of-living adjustments.
- Plan B: Generally 5% of earnable compensation to maintain all benefits, except the compounded cost of living adjustments which are capped at 5%.
- Plan C: 5% of earnable compensation as determined under the employee contribution for the Teachers' Pension System (Plan C provides a two-part benefit based on benefits of the Teachers' Retirement System and the Teachers' Pension System).

Interest earned on all employee contributions is 4% per year, compounded annually, until retirement, withdrawal of accumulated contributions, death, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

Normal retirement age is age 60.

4. Normal Service Retirement Allowance

Eligibility: 30 years of eligibility service or attainment of age 60.

Allowance: 1/55th of average final compensation for the three highest years as a member for each year of creditable service. Creditable service is based on a full normal working time for teachers – 10 months equals one year.

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Teachers' Retirement System; for creditable service after election date, the amount determined by the service retirement formula for the applicable component of the Teachers' Pension System.

5. Early Retirement Allowance

Eligibility: 25 years of eligibility service and less than 60 years old.

Allowance: Service Retirement allowance reduced by 0.5% for each month that date of retirement precedes the earlier of age 60 or the date the member would have completed 30 years of eligibility service (maximum reduction of 30%).

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Teachers' Retirement System (maximum reduction of 30%); for creditable service after election date, the amount determined by the service retirement formula for the applicable component of the Teachers' Pension System for each month retirement occurs prior to age 62 (maximum reduction of 42%).

6. Disability Retirement Allowance

<u>Ordinary</u>

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: The benefit is 1/55th of average final compensation for the three highest years as a member for each year of creditable service. The minimum benefit is 25% of average final compensation; the maximum benefit can be no greater than 1/55th of average final compensation for each year of creditable service the member would have accrued if employment continued to age 60.

Plan C: The benefit is the greater of the Teachers' Retirement System allowance noted above, or the ordinary disability benefit of the Teachers' Pension System.

<u>Accidental</u>

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty at a definite time and place without willful negligence by the member. Allowance: The benefit is 66.67% of average final compensation for the three highest years as a member, plus the annuity provided by accumulated member contributions. The maximum benefit cannot be greater than the average final compensation, including any annuitized accumulated contributions.

7. Death Benefits

Ordinary Death Benefit For Active Member With Less Than One Year of Service

Eligibility: Less than one year of eligibility service and not eligible for a special death benefit

Benefit: Return of accumulated contributions

Ordinary Death Benefit For Active Member With One Or More Years of Service

Eligibility: One or more years of eligibility service and not eligible for a special death benefit

Benefit:

Members who at the time of death are younger than age 55 or have less than 15 years of service. One-time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions to the member's designated beneficiary.

Members who at the time of death are eligible to retire and are age 55 or older with at least 15 years of service. The surviving spouse of a deceased member may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) a monthly allowance under Option 2 (100% survivor benefit). In cases where a deceased member is not survived by a spouse, the decedent's children may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) an allowance equal to 50% of the basic allowance that would have been paid to the deceased member, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. If any child is disabled, the benefit will continue for that child as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, the member's designated beneficiary shall receive a one-time lump sum payment consisting of the member's accumulated contributions and the member's annual compensation at the time of death.

Special Death Benefit For Active Member

Eligibility: Death arising out of or in the course of the actual performance of duty without willful negligence by the member.

Benefit: 66.67% of average final compensation for the three highest years as a member payable to a surviving spouse, decedent's children or dependent parents. Accumulated member contributions are paid to the designated beneficiary. Children of deceased members receiving a special death benefit will continue to receive this benefit, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. Disabled children receiving a special death benefit may receive a special death benefit as long as they remain disabled, regardless of age.

Death Benefit For Vested Former Member

If member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

Eligibility: Five years of eligibility service and separation from employment other than by death or retirement.

Allowance: Vested allowance payable at normal retirement age, provided member does not withdraw accumulated contributions.

If member dies before payment of the vested allowance starts, only accumulated member contributions are returned.

9. Cost of Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Any COLAs are effective July 1 for all allowances which have been in payment for one year.

- Selection A (Additional Member Contributions): Uncapped and compounded.
- Selection B (Limited COLA): Capped at 5% and compounded.
- Selection C (Combination Formula): For creditable service on or after the effective date of Selection C, generally, with limited exceptions, COLA is capped at 3% and compounded. For creditable service before the effective date of Selection C, COLA is calculated based on the applicable component (A or B) to which the member was subject prior to electing Section C.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

10. Optional Forms of Payment

Basic service allowance is a single life annuity.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.

- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

Vested former members who are eligible to receive a vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

<u>11. Reduction for Benefits Payable under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. Teachers' Retirement System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits. Offsets do not include any calculation of cost-of-living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation Commission if a recipient is receiving an ordinary disability payment from the Teachers' Retirement System for the same injury or illness. Any offset taken for an accidental disability from the Teachers' Retirement System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

Teachers' Pension System

A COMPOSITE PICTURE						
		2024		2023		
Total Membership						
Active Vested		61,101		60,185		
Active Non-Vested		54,124		52,476		
Vested Former Members		23,433		23,626		
Retired Members		64,968		63,217		
Active Members						
Number		115,225		111,792		
Average Age		45.4		45.3		
Average Years of Service		11.9		12.0		
Average Annual Salary	\$	78,891	\$	75,156		
Retirees & Beneficiaries						
Number		64,968		63,217		
Average Age		73.1		72.7		
Average Monthly Benefit	\$	2,346	\$	2,254		

1. Membership

Membership is generally a condition of employment for those teachers, faculty members, and educational employees, specified in SPP § 23-206 of the Annotated Code of Maryland, hired on or after January 1, 1980. Certain eligible higher education employees may elect to join an optional defined contribution retirement program provided by the State, known as the Optional Retirement Program (ORP). The ORP is separate and distinctive from the supplemental program administered by the Maryland Supplemental Retirement Plan. All individuals who are members of the Teacher's Pension System on or before June 30, 2011, participate in the Alternate Contributory Pension Selection (ACPS) except for the members who transferred from the Teachers' Retirement System after April 1, 1998 or former vested members who terminated employment prior to July 1, 1998.

All individuals who enroll in the Teachers' Pension System on or after July 1, 2011, participate in the Reformed Contributory Pension Benefit (RCPB).

2. Member Contributions

Members of both the ACPS and the RCPB are required to make contributions of 7% of earnable compensation.

Contributions earn interest at 5% per year, compounded annually, until retirement, withdrawal of accumulated contributions, death, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

For members of the Alternate Contributory Pension Selection, normal retirement age is age 62.

For members of the Reformed Contributory Pension Benefit, normal retirement age is age 65.

4. Normal Service Retirement Allowance

ACPS Eligibility 30 years of eligibility service or attainment of one of the following:

Age 62 with five years of eligibility service. Age 63 with four years of eligibility service. Age 64 with three years of eligibility service. Age 65 and older with two years of eligibility service.

ACPS Allowance The greater of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average final compensation for the three highest consecutive years as a member for each year of creditable service on or before June 30, 1998;
- (ii) 0.8% of average final compensation for the three highest consecutive years as a member up to the Social Security Integration Level (SSIL) plus 1.5% of average final compensation over the integration level for each year of creditable service on or before June 30, 1998;

(iii) the number of years of the member's creditable service on or after July 1, 1998 multiplied by 1.8% of the member's average final compensation for the three highest consecutive years as a member.

RCPB Eligibility: Combined age and eligibility service of at least 90 years or age 65 after 10 years of eligibility service.

RCPB Allowance: 1.5% of average final compensation for the five highest consecutive years as a member for each year of creditable service on or after July 1, 2011.

The SSIL is the average of all Social Security Wage Bases over the 35 calendar years prior to your retirement.

Note: Members who transferred into the Teachers' Pension System, on or after April 1, 1998, receive benefits based on the provisions of the NCPS (refer to page 149) in effect as of January 1, 1980, except for COLA benefits.

5. Early Retirement Allowance

ACPS Eligibility: Age 55 with at least 15 years of eligibility service.

ACPS Allowance: Service retirement allowance computed as of early retirement date, reduced by 0.5% for each month that early retirement date precedes age 62 (maximum reduction of 42%).

RCPB Eligibility: Age 60 with at least 15 years of eligibility service.

RCPB Allowance: Service retirement allowance computed as of early retirement date, reduced by 0.5% for each month that early retirement date precedes age 65 (maximum reduction of 30%).

6. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is likely to be permanent.

Allowance: The benefit is the service retirement allowance computed on the basis that service continues until normal retirement age. If disability occurs after age 62 (age 65 for RCPB), the benefit is based on creditable service at time of retirement.

<u>Accidental</u>

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty without willful negligence by the member.

Allowance: The benefit is 66.67% of average final compensation for the three highest consecutive years (five highest for RCPB) as a member plus the annuity provided by accumulated member contributions. The maximum benefit cannot be greater than the average final compensation including any annuitized accumulated contributions.

7. Death Benefits

Ordinary Death Benefit For Active Member With Less Than One Year of Service

Eligibility: Less than one year of eligibility service and not eligible for a special death benefit.

Benefit: Return of accumulated contributions

Ordinary Death Benefit For Active Member With One Or More Years of Service

Eligibility: One or more years of eligibility service and not eligible for a special death benefit

Benefit:

Members who at the time of death are not members of the Reformed Contributory Pension Benefit, are younger than age 55 and have less than 15 years of service or are members of the Reformed Contributory Pension Benefit, are younger than age 60 and have less than 15 years of service. One-time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions to the member's designated beneficiary.

Members who at the time of death: (1) are eligible to retire; (2) have accrued at least 25 years of eligibility service; (3) are not members of the Reformed Contributory Pension Benefit and are age 55 or older with at least 15 years of service; or (4) are members of the Reformed Contributory Pension Benefit and are age 60 or older with at least 15 years of service. The surviving spouse of a deceased member may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) a monthly allowance under Option 2 (100% survivor benefit). In cases where a deceased member is not survived by a spouse, the decedent's children may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) an allowance equal to 50% of the basic allowance that would have been paid to the deceased member, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. If any child is disabled, the benefit will continue for that child as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, the member's designated beneficiary shall receive a one-time lump sum payment consisting of the member's accumulated contributions and the member's annual compensation at the time of death.

Special Death Benefit For Active Member

Eligibility: Death arising out of or in the course of the actual performance of duty without willful negligence by the member.

Benefit: 66.67% of average final compensation for the three highest consecutive years as a member, except for member's participating in the RCPB component for which the average final compensation is the five highest consecutive years as a member, payable to a surviving spouse, decedent's children or dependent parents. Accumulated contributions are paid to the designated beneficiary. Children of deceased members receiving a special death benefit will continue to receive this benefit prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. Disabled children receiving a special death benefit may receive a special death benefit as long as they remain disabled, regardless of age.

Death Benefit For Vested Former Member

If a member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

ACPS Eligibility: Five years of eligibility service and separation from employment other than by death or retirement.

ACPS Allowance: Accrued retirement allowance payable at age 62 provided member does not withdraw accumulated contributions. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time on or after attainment of age 55, reduced by 0.5% for each month that benefit commencement date precedes age 62 (maximum reduction of 42%.)

If member dies before payment of the vested allowance starts, only accumulated member contributions are returned.

RCPB Eligibility: 10 years of eligibility service and separation from employment other than by death or retirement

RCPB Allowance: Accrued retirement allowance payable at age 65 provided member does not withdraw accumulated contributions. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time on or after attainment of age 60, reduced by 0.5% for each month that benefit commencement date precedes age 65 (maximum reduction of 30%.)

If member dies before payment of the vested allowance starts, only accumulated member contributions are returned.

9. Cost of Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Effective July 1, 1998, and for an allowance based on creditable service before July 1, 2011, the adjustment is capped at a maximum of 3% compounded and is applied to all allowances which have been in payment for one year. For an allowance based on creditable service earned on or after July 1, 2011, the COLA adjustment is capped at 2.5% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was greater than or equal to the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year. The adjustment is capped at 1% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was less than the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

Any adjustments are effective July 1.

10. Optional Forms of Payment

Basic service allowance is a single life annuity.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

Vested former members who are eligible to receive a vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

<u>11. Reduction for Benefits Payable under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. Teachers' Pension System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits.Offsets do not include any calculation of cost-of-living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation

Commission if a recipient is receiving an ordinary disability payment from the Teachers' Pension System for the same injury or illness. Any offset taken for an accidental disability from the Teachers' Pension System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

Employee's Retirement System

A COMPOSITE PICTURE						
		2024		2023		
Total Membership						
Active Vested		4,783		4,830		
Active Non-Vested		3,418		3,294		
Vested Former Members		743		753		
Retired Members		17,624		17,994		
Active Members						
Number		8,201		8,124		
Average Age		46.1		46.1		
Average Years of Service		12.7		13.2		
Average Annual Salary	\$	67,165	\$	64,165		
Retirees & Beneficiaries						
Number		17,624		17,994		
Average Age		73.8		73.6		
Average Monthly Benefit	\$	2,584	\$	2,475		

1. Membership

System closed to new members hired on or after January 1, 1980. Members on December 31, 1979 continue to be members unless they elected to transfer into the Employees' Pension System (established January 1, 1980) prior to January 1, 2005.

Membership generally includes employees of the State and other eligible participating employers.

2. Member Contributions

- Plan A: Generally, 7% of earnable compensation to maintain all benefits, including unlimited compounded cost-of-living adjustments.
- Plan B: Generally, 5% of earnable compensation to maintain all benefits, except the compounded cost-of living adjustments which are capped at 5%.
- Plan C: Provides a two-part benefit based on benefits of the Employees' Retirement System and the Employees' Pension System. Employee contributions, if any, are based on participation of the employer in the applicable component of the Employees' Pension System. (refer to summary of Employees' Pension System).

Interest earned on all employee contributions is 4% per year, compounded annually, until retirement, withdrawal of accumulated contributions, death, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

Normal retirement age is age 60.

4. Normal Service Retirement Allowance

Eligibility: 30 years of eligibility service or attainment of age 60.

Allowance: 1/55th of average final compensation for the three highest years as a member for each year of creditable service.

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Employees' Retirement System; for creditable service after election date, the amount determined by the service retirement formula for the applicable component of the Employees' Pension System under which the employer and member participates.

5. Early Retirement Allowance

Eligibility: 25 years of eligibility service and less than 60 years old.

Allowance: Service retirement allowance reduced by 0.5% for each month that date of retirement precedes the earlier of age 60 or the date the member would have completed 30 years of eligibility service (maximum reduction of 30%).

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Employees' Retirement System with a maximum reduction of 30%; for creditable service after election date, the amount determined by the service retirement formula for the applicable component of the Employees' Pension System under which the employer participates with a 0.5% reduction for each month retirement occurs prior to age 62 (maximum reduction of 42%).

6. Disability Retirement Allowance

<u>Ordinary</u>

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent. Allowance: The benefit is 1/55th of average final compensation for the three highest years as a member for each year of creditable service. The minimum benefit is 25% of average final compensation; the maximum benefit can be no greater than 1/55th of average final compensation for each year of creditable service the member would have accrued if employment continued to age 60.

Plan C: The benefit is the greater of the Employees' Retirement System allowance noted above, or the ordinary disability benefit of the Employees' Pension System.

<u>Accidental</u>

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty at a definite time and place without willful negligence by the member.

Allowance: The benefit is 66.67% of average final compensation for the three highest years as a member, plus the annuity provided by accumulated member contributions. The maximum benefit cannot be greater than the average final compensation, including any annuitized accumulated contributions.

7. Death Benefits

Ordinary Death Benefit For Active Member With Less Than One Year of Service

Eligibility: Less than one year of eligibility service and not eligible for a special death benefit.

Benefit: Return of accumulated contributions

Ordinary Death Benefit For Active Member With One or More Years of Service

Eligibility: One or more years of eligibility service and not eligible for a special death benefit.

Benefit:

Members who at the time of death are younger than age 55 or have less than 15 years of service.

One-time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions to the member's designated beneficiary. *Members who at the time of death are eligible to retire* and are age 55 or older with at least 15 years of service. The surviving spouse of a deceased member may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) a monthly allowance under Option 2 (100% survivor benefit). In cases where a deceased member is not survived by a spouse, the decedent's children may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) an allowance equal to 50% of the basic allowance that would have been paid to the deceased member, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. If any child is disabled, the benefit will continue for that child as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, the member's designated beneficiary shall receive a one-time lump sum payment consisting of the member's accumulated contributions and the member's annual compensation at the time of death.

Special Death Benefit For Active Member

Eligibility: Death arising out of or in the course of the actual performance of duty without willful negligence by the member.

Benefit: 66.67% of average final compensation for the three highest years as a member payable to a surviving spouse, decedent's children or dependent parents. Accumulated member contributions are paid to the designated beneficiary. Children of deceased members receiving a special death benefit will continue to receive this benefit, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. Disabled children receiving a special death benefit may receive a special death benefit as long as they remain disabled, regardless of age.

Death Benefit For Vested Former Member

If member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

Eligibility: Five years of eligibility service and separation from employment other than by death or retirement.

Allowance: Vested allowance payable at normal retirement age, provided member does not withdraw accumulated member contributions.

9. Cost-of-Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Any COLAs are effective July 1 for all allowances which have been in payment for one year.

- Selection A (Additional Member Contributions): Uncapped and compounded.
- Selection B (Limited COLA): Capped at 5% and compounded.
- Selection C (Combination Formula): For creditable service on or after the effective date of Selection C, generally, with limited exceptions, COLA is capped at 3% and compounded. For creditable service before the effective date of Selection C, COLA is calculated based on the applicable component (A or B) to which the member was subject prior to electing Selection C.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

10. Optional Forms of Payment

Basic service allowance is a single life annuity.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

Vested former members who are eligible to receive a vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

<u>11. Reduction for Benefits Payable Under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. Employees' Retirement System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits. Offsets do not include any calculation of cost-of-living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation Commission if a recipient is receiving an ordinary disability payment from the Employees' Retirement System for the same injury or illness. Any offset taken for an accidental disability from the Employees' Retirement System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

Correctional Officers' Retirement System

COMPOSITE THAT INCLUDES STATE & MUNICIPAL					
		2024		2023	
Total Membership					
Active Vested		4,670		4,702	
Active Non-Vested		3,396		3,270	
Vested Former Members		635		636	
Retired Members		7,216		7,023	
Active Members					
Number		8,066		7,972	
Average Age		45.5		45.1	
Average Years of Service		12.4		12.6	
Average Annual Salary	\$	67,035	\$	64,132	
Retirees & Beneficiaries					
Number		7,216		7,023	
Average Age		64.1		63.7	
Average Monthly Benefit	\$	2,336	\$	2,237	

1. Membership

Membership is generally a condition of employment for correctional officers serving in the first six job classifications, individuals serving as a security chief, a facility administrator, and assistant warden or a warden, maximum security attendants at Clifton T. Perkins Hospital Center, and employees of the State as provided in SPP § 25-201. This includes participating governmental units who elect to have their detention center officers participate in the Correctional Officers' Retirement System.

2. Member Contributions

Members are required to make contributions of 5% of earnable compensation.

Interest earned on all employee contributions is 4% per year, compounded annually, until retirement, withdrawal of accumulated contributions, death, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

Normal retirement age is age 55 for service retirement, age 60 for disability retirement.

4. Normal Service Retirement Allowance

Eligibility: For individuals who are members on or before June 30, 2011, either age 55 with at least 5 years of eligibility service credit or 20 years of eligibility service, regardless of age. For individuals who are members on or after July 1, 2011, either age 55 with at least 10 years of eligibility service credit, or 20 years of eligibility service, regardless of age.

Allowance: For individuals who are members on or before June 30, 2011, 1/55th of average final compensation for the three highest years as a member for each year of creditable service. For individuals who are members on or after July 1, 2011, 1/55th of average final compensation for the five highest years as a member for each year of creditable service.

5. Early Retirement Allowance

Not applicable to the Correctional Officers' Retirement System, except for certain Baltimore City Jail employees who may retire with 10 years of creditable service., as specified in SPP § 25-401.1.

6. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is likely to be permanent.

<u>Allowance</u>: The benefit is $1/55^{\text{th}}$ of the average final compensation for the three highest years as a member (five highest for members enrolled on or after July 1, 2011). The minimum benefit is 25% of average final compensation; the maximum benefit can be no greater than 1/55th of average final compensation for each year of creditable service the member would have accrued if employment continued to age 60.

<u>Accidental</u>

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty at a definite time and place without willful negligence by the member. Allowance: The benefit is 66.67% of average final compensation for the three highest years as a member (five highest for members enrolled on or after July 1, 2011), plus the annuity provided by accumulated member contributions. The maximum benefit cannot be greater than the average final compensation, including any annuitized accumulated contributions.

7. Death Benefits

Ordinary Death Benefit For Active Member With Less Than One Year of Service

Eligibility: Less than one year of eligibility service and not eligible for a special death benefit.

Benefit: Return of accumulated contributions

Ordinary Death Benefit For Active Members With One Or More Years of Service

Eligibility: One or more years of eligibility service and not eligible for a special death benefit.

Benefit:

Members who at the time of death are younger than age 55 or have less than 15 years of service One-time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions to the member's designated beneficiary.

Members who at the time of death are eligible to retire and are age 55 or older with at least 15 years of service The surviving spouse of a deceased member may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) a monthly allowance under Option 2 (100% survivor benefit). In cases where a deceased member is not survived by a spouse, the decedent's children may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) an allowance equal to 50% of the basic allowance that would have been paid to the deceased member, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. If any child is disabled, the benefit will continue for that child past age 26 as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, the member's designated beneficiary shall receive a one-time lump sum payment consisting of the member's accumulated contributions and the member's annual compensation at the time of death.

Special Death Benefit for Active Member

Eligibility: Death arising out of or in the course of the actual performance of duty without willful negligence by the member.

Benefit: 66.67% of average final compensation for the three highest years as a member payable to a surviving spouse, the decedent's children or dependent parents. Accumulated member contributions are paid to the designated beneficiary. Children of deceased members receiving a special death benefit will continue to receive this benefit, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. Disabled children receiving a special death benefit may receive a special death benefit as long as they remain disabled, regardless of age.

Death Benefit For Vested Former Member

If member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

Eligibility: For individuals who are members on or before June 30, 2011, five years of eligibility service. For individuals who become member on or after July 1, 2011, 10 years of eligibility service. Member must also be separated from employment other than by death or retirement.

Allowance: Service retirement allowance payable at age 55 provided the member does not withdraw the member's accumulated contributions.

9. Cost-of-Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Any COLAs are effective July 1 for all allowances which have been in payment for one year.

Uncapped compounded COLAs are applied to all benefits attributable to creditable service earned on or before June 30, 2011.

For an allowance based on creditable service earned on or after July 1, 2011, the COLA is capped at 2.5% if, for the calendar year ending December 31 in the previous fiscal year the several systems' total investment performance was greater than or equal to the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year. The adjustment is capped at 1% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was less than the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

10. Optional Forms of Payment

Basic service allowance is a single life annuity.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

Vested former members who are eligible to receive a vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

<u>11. Reduction for Benefits Payable Under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. Correctional Officers' Retirement System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits. Offsets do not include any calculation of cost of living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation Commission if a recipient is receiving an ordinary disability payment from the

Correctional Officers' Retirement System for the same injury or illness. Any offset taken for an accidental disability from the Correctional Officers' Retirement System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

Legislative Pension Plan

A COMPOSITE PICTURE					
		2024		2023	
Total Membership					
Active Vested		80		82	
Active Non-Vested		107		104	
Vested Former Members		47		53	
Retired Members		325		327	
Active Members					
Number		187		186	
Average Age		53.8		53.1	
Average Years of Service		7.9		7.3	
Average Annual Salary	\$	54,539	\$	52,465	
Retirees & Beneficiaries					
Number		325		327	
Average Age		77.2		76.5	
Average Monthly Benefit	\$	1,642	\$	1,594	

1. Membership

Membership is generally a condition of employment for members of the Maryland General Assembly during the 2019-2022 term of office.

2. Member Contributions

Members are required to contribute 7% of annual salary up to 22 years and three months of creditable service.

Interest earned on all employee contributions is 4% per year, compounded annually, until retirement or withdrawal of accumulated contributions.

3. Normal Retirement Age

For members who have creditable service prior to January 14, 2015, normal retirement age is age 60.

For members who do not have creditable service prior to January 14, 2015, normal retirement age is age 62.

4. Service Retirement Allowance

Eligibility: For individuals who have creditable service in the Legislative Pension Plan before January 14, 2015, age 60 with eight years of creditable service. For individuals who have no creditable service in the Legislative Pension Plan before January 14, 2015, age 62 with eight years of creditable service.

Allowance: 3% of salary of an active legislator for each year of service, multiplied by the number of years of creditable service. The maximum benefit available for a member is 66.67% of salary payable to an active legislator.

5. Reduced Service Retirement Allowance

Eligibility: For individuals who have creditable service in the Legislative Pension Plan before January 14, 2015, age 50 with eight years of creditable service. For individuals who have no creditable service in the Legislative Pension Plan before January 14, 2015, age 55 with eight years of creditable service.

Allowance: For individuals who have creditable service in the Legislative Pension Plan before January 14, 2015, a service retirement allowance computed as of early retirement date, reduced by 0.5% for each month under age 60 (maximum reduction of 60%). For individuals who have no creditable service in the Legislative Pension Plan before January 14, 2015, a service retirement allowance computed as of early retirement date, reduced by 0.5% for each month under age 62 (maximum reduction of 42%).

6. Disability Retirement Allowance

Eligibility: Eight years of creditable service, regardless of age, and certification of the medical board designated by the Board of Trustees that the member is mentally or physically incapacitated from further performance of duty as a legislator, and that incapacity is likely to be permanent.

Allowance: Service retirement allowance, regardless of age.

7. Death Benefits

<u>Death Of A Member With At Least Eight Years Of</u> <u>Creditable Service</u>

Eligibility: At least eight years of creditable service.

Beneficiary: Payment of the benefit shall be made to the member's surviving spouse. If there is no surviving spouse at the time of the member's death, the benefit shall be prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If any child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment will be made to the member's designated beneficiary.

Benefit: The member's beneficiary (surviving spouse, children, or designated beneficiary) may elect to receive: (1) a return of the member's accumulated contributions plus the member's annual salary, if any, at the time of death; or (2) an annuity equal to 50% of the retirement allowance that would have been paid at the member's death, regardless of the member's age. The surviving spouse or children will begin receiving the death benefit at the time of the member's death. A designated beneficiary who elects to receive the annuity may not begin receiving the benefit until the beneficiary reaches age 60, if the deceased member had creditable service in the Legislative Pension Plan before January 14, 2015, or age 62, if the deceased member did not have creditable service before January 14, 2015. The designated beneficiary may elect to begin receiving a reduced annuity at age 50, if the deceased member had creditable service before January 14, 2015, or age 55 if the deceased member did not have creditable service before January 14, 2015.

Death Of A Member With Less Than Eight Years Of Creditable Service

Eligibility: A member currently serving in the legislature with less than eight years of creditable service

Beneficiary: Payment of the benefit shall be made to the member's surviving spouse. If there is no surviving spouse at the time of the member's death, the benefit shall be prorated equally among the eligible children. A child is eligible for a prorated share if the child is under age 26 or the child is disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment will be made to the member's designated beneficiary. If a member designates more than one beneficiary, the benefit shall be prorated equally among each beneficiary.

Benefit: A lump-sum benefit equal to the member's accumulated contributions plus the member's annual salary at the time of death.

Death Of A Member With No Beneficiary

On death of a member who is not survived by a spouse, children, or designated beneficiary, the Board of Trustees shall pay the member's accumulated contributions to the estate of the member.

Death Of Retiree

Upon the death of a retiree, a survivor allowance equal to 50% of the retiree's retirement allowance is payable to the retiree's surviving spouse for the spouse's life. If the retiree has no surviving spouse and the retiree has creditable service before January 14, 2015, the full survivor allowance is payable to the designated beneficiary for life beginning at age 60 or an optional reduced survivor allowance is payable to the designated beneficiary for life beginning at age 50. If the retiree has no surviving spouse and the retiree has no creditable service before January 14, 2015, the full survivor allowance is payable to the designated beneficiary for life beginning at age 50. If the retiree has no surviving spouse and the retiree has no creditable service before January 14, 2015, the full survivor allowance is payable to the designated beneficiary for life beginning at age 62 or an optional reduced survivor allowance is payable to the designated beneficiary for life beginning at age 55.

8. Vested Allowance

Eligibility: Eight years of creditable service and separation from employment other than by death or retirement.

Allowance: For individuals who have creditable service in the Legislative Pension Plan before January 14, 2015, a service retirement allowance payable at age 60, provided the member has not withdrawn the member's accumulated contributions. For individuals who have no creditable service in the Legislative Pension Plan before January 14, 2015, a service retirement allowance payable at age 62, provided the member has not withdrawn the member's accumulated contributions.

9. Cost-of-Living Adjustments

Generally, allowances are recalculated each time the salary for a sitting legislator increases.

10. Optional Forms of Payment

Basic Allowance: Normal service allowance with a 50% joint and survivor annuity to the retiree's surviving spouse. If there is no surviving spouse, to the retiree's designated beneficiary. A surviving spouse will begin receiving the death benefit at the time of the retiree's death. A designated beneficiary may not begin receiving the benefit until the beneficiary reaches age 60, if the deceased retiree had creditable service in the Legislative Pension Plan before January 14, 2015, or age 62, if the deceased retiree did not have creditable service before January 14, 2015. The designated beneficiary may elect to begin receiving a reduced annuity at age 50, if the deceased retiree had creditable service before January 14, 2015, or age 55 if the deceased retiree did not have creditable service before January 14, 2015, or age 55 if the deceased retiree did not have creditable service before January 14, 2015.

Option 1: 100% joint and survivor annuity. If, at the time of retirement the member is married and elects to receive Option 1, the member's spouse must be the designated beneficiary. The designated beneficiary may not be more than 10 years younger than the member unless the beneficiary is the member's spouse or disabled child.

Employees' Pension System

A COMPOSITE PICTURE						
		2024		2023		
Total Membership						
Active Vested		33,304		33,206		
Active Non-Vested		43,443		39,851		
Vested Former Members		21,459		22,215		
Retired Members		67,784		66,789		
Active Members						
Number		76,747		73,057		
Average Age		48.3		48.6		
Average Years of Service		10.4		10.9		
Average Annual Salary	\$	71,834	\$	67,828		
Retirees & Beneficiaries						
Number		67,784		66,789		
Average Age		72.6		72.1		
Average Monthly Benefit	\$	1,609	\$	1,541		

1. Membership

Membership is generally a condition of employment for all regular employees of the State of Maryland hired on or after January 1, 1980, excluding those eligible for the Teachers' Retirement System, Teachers' Pension System, State Police Retirement System, certain judges, correctional officers, Law Enforcement Officers Pension System, and members of the General Assembly. Certain governmental units also have elected to participate in the System.

There are four plans under the Employees' Pension System.

- Noncontributory Pension System (NCPS) The original pension system established on January 1, 1980 that only applies to certain participating governmental units that did not elect to participate in the Contributory Pension System, Alternate Contributory Pension Selection, or Reformed Contributory Pension Benefit.
- Employees' Contributory Pension System (ECPS) The ECPS established July 1, 1998 that only applies to certain participating governmental units that elected the ECPS but did not elect to participate in the Alternate Contributory Pension Selection, or Reformed Contributory Pension Benefit.
- Alternate Contributory Pension Selection (ACPS) applies to all State employees and employees of participating governmental units that are members of the ACPS on or before June 30, 2011.
- Reformed Contributory Pension Benefit (RCPB) Applies to all State employees and, employees of participating governmental units enrolling in the Employees' Pension System on or after July 1, 2011. It does not apply to employees of participating governmental units that did not elect to participate in the ACPS or RCPB.

2. Member Contributions

- NCPS: Members are only required to make contributions of 5% on earnable compensation that exceeds the Social Security Taxable Wage Base.
- ECPS: Members are required to make contributions of 2% of earnable compensation.
- ACPS: Members are required to make contributions of 7% of earnable compensation.
- RCPB: Members are required to make contributions of 7% of earnable compensation.

Contributions earn interest at 5% per year, compounded annually, until retirement, withdrawal of accumulated contributions, death, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

For members of the Non-Contributory, Contributory, or Alternate Contributory Pension Selection, normal retirement age is age 62.

For members of the Reformed Contributory Pension Benefit, normal retirement age is age 65.

4. Normal Service Retirement Allowance

NCPS, ECPS, and ACPS Eligibility 30 years of eligibility service or attainment of one of the following:

Age 62 with five years of eligibility service Age 63 with four years of eligibility service Age 64 with three years of eligibility service Age 65 or older with two years of eligibility service

NCPS Allowance:

0.8% of average final compensation up to the Social Security Integration Level (SSIL) for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service;

ECPS Allowance: The greater of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average final compensation for the three highest consecutive years as a member for each year of creditable service on or before June 30, 1998;
- (ii) 0.8% of average final compensation up to the SSIL for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service on or before June 30, 1998;
- (iii) 1.4% of average final compensation for the three highest consecutive years as a member for each year of creditable service after June 30, 1998.

ACPS Allowance: The greater of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average final compensation for the three highest consecutive years as a member for each year of creditable service on or before June 30, 1998;
- (ii) 0.8% of average final compensation up to the SSIL for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service on or before June 30, 1998;
- (iii) 1.8% of average final compensation for the three highest consecutive years as a member for each year of creditable service after June 30, 1998.

RCPB Eligibility Combined age and eligibility service of at least 90 years or age 65 with 10 or more years of eligibility service.

RCPB Allowance: 1.5% of average final compensation for the five highest consecutive years as a member for each year of creditable service on or after July 1, 2011.

SSIL is the average of all Social Security Wage Bases over the 35 calendar years prior to your retirement.

Note: Members who transferred into the Employees' Pension System, on or after April 1, 1998, receive benefits based on the provisions of the NCPS as in effect on January 1, 1980 except for COLA benefits.

5. Early Retirement Allowance

NCPS, ECPS, and ACPS Eligibility: Age 55 and at least 15 years of eligibility service.

NCPS, ECPS, and ACPS Allowance: Service retirement allowance computed as of early retirement date, reduced by 0.5% for each month that early retirement date precedes age 62 (maximum reduction is 42%).

RCPB Eligibility: Age 60 with at least 15 years of eligibility service.

RCPB Allowance: Service retirement allowance computed as of early retirement date, reduced by 0.5% for each month that early retirement date precedes age 65 (maximum reduction is 30%).

6. Disability Retirement Allowance

<u>Ordinary</u>

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is likely to be permanent.

Allowance: The benefit is the service retirement allowance computed on the basis that service continues until normal retirement age. If disability occurs on or after age 62 (age 65 for RCPB), the benefit is based on creditable service at time of retirement.

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty without willful negligence by the member.

Allowance: The benefit is 66.67% of average final compensation for the three highest consecutive years (five highest for RCPB) as a member, plus the annuity provided by accumulated member contributions. The maximum benefit cannot be greater than the average final compensation including any annuitized accumulated contributions.

7. Death Benefits

Ordinary Death Benefit For Active Member With Less Than One Year of Service

Eligibility: Less than one year of eligibility service and not eligible for a special death benefit.

Benefit: Return of accumulated contributions

Ordinary Death Benefit For Active Member With One Or More Years of Service

Eligibility: One or more years of eligibility service and not eligible for a special death benefit.

Benefit:

Members who at the time of death are not members of the Reformed Contributory Pension Benefit, are younger than age 55, and have less than 15 years of service or are members of the Reformed Contributory Pension Benefit, are younger than age 60, and have less than 15 years of service. One-time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions to the member's designated beneficiary.

Members who at the time of death: (1) are eligible to retire; (2) have accrued at least 25 years of eligibility service; (3) are not members of the Reformed Contributory Pension Benefit and are age 55 or older with at least 15 years of service; or (4) are members of the Reformed Contributory Pension Benefit and are age 60 or older with at least 15 years of service. The surviving spouse of a deceased member may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) a monthly allowance under Option 2 (100% survivor benefit). In cases where a deceased member is not survived by a spouse, the decedent's children may elect to receive: (1) a one-time lump sum payment of the member's annual earnable compensation at the time of death plus the member's accumulated contributions; or (2) an allowance equal to 50% of the basic allowance that would have been paid to the deceased member, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. If any child is disabled, the benefit will continue for that child as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, the member's designated beneficiary shall receive a one-time lump sum payment consisting of the member's accumulated contributions and the member's annual compensation at the time of death.

Special Death Benefit For Active Member

Eligibility: Death arising out of or in the course of the actual performance of duty without willful negligence by the member.

Benefit: 66.67% of average final compensation for the three highest consecutive years as a member, except for member's participating in the RCPB component for which the average final compensation is the five highest consecutive years as a member, payable to a surviving spouse, the decedent's children or dependent parents. Accumulated member contributions are paid to the designated beneficiary. Children of deceased members receiving a special death benefit will continue to receive this benefit, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. Disabled children receiving a special death benefit may receive a special death benefit as long as they remain disabled, regardless of age.

Death Benefit For Vested Former Member

If a member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

NCPS, ECPS, and ACPS Eligibility: Five years of eligibility service and separation from employment other than by death or retirement.

NCPS, ECPS, and ACPS Allowance: Accrued retirement allowance payable at age 62. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time on or after attainment of age 55, reduced by 0.5% for each month that benefit commencement date precedes age 62 (maximum reduction of 42%).

If member dies before payment of the vested allowance starts, only accumulated member contributions are returned.

RCPB Eligibility: 10 years of eligibility service and separation from employment other than by death or retirement.

RCPB Allowance: Accrued retirement allowance payable at age 65 provided member does not withdraw accumulated contributions. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time on or after attainment of age 60, reduced by 0.5% for each month that benefit commencement date precedes age 65 (maximum reduction of 30%).

If member dies before payment of the vested allowance starts, only accumulated member contributions are returned.

9. Cost-of-Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Generally, effective July 1, 1998, and for an allowance based on creditable service earned before July 1, 2011, the adjustment is capped at a maximum of 3% compounded and is applied to all allowances which have been in payment for one year.

Generally, for an allowance based on creditable service earned on or after July 1, 2011, the COLA is capped at 2.5% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was greater than or equal to the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year. The adjustment is capped at 1% if, for the calendar year ending December 31 in the previous fiscal year the several systems' total investment performance was less than the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year.

For certain individuals, such as employees of a participating governmental unit that has not elected the contributory pension benefit or the Alternate Contributory Pension Selection for its members, or their surviving beneficiaries, the allowance is subject to a simple COLA capped at 3%.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

10. Optional Forms of Payment

Basic service allowance is in a single life annuity.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

Vested former members who are eligible to receive a vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

<u>11. Reduction for Benefits Payable Under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. Employees' Pension System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits. Offsets do not include any calculation of cost-of-living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation Commission if a recipient is receiving an ordinary disability payment from the Employees' Pension System for the same injury or illness. Any offset taken for an accidental disability from the Employees' Pension System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

	State Po	olice	Retirement	System
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A COMPOSITE PICTURE					
		2024		2023	
Total Membership					
Active Vested		817		809	
Active Non-Vested		495		526	
Vested Former Members		85		88	
Retired Members		2,638		2,606	
Active Members					
Number		1,312		1,333	
Average Age		36.9		36.8	
Average Years of Service		12.7		12.6	
Average Annual Salary	\$	110,538	\$	104,522	
Retirees & Beneficiaries					
Number		2,638		2,606	
Average Age		66.5		66.1	
Average Monthly Benefit	\$	5,286	\$	5,048	

1. Membership

Membership is a condition of employment for all officers of the Maryland State Police.

2. Member Contributions

Members are required to contribute 8% of earnable compensation. Beginning July1, 2020, no member contributions are required after 28 years of service.

Contributions earn interest at 4% per year, compounded annually, until retirement, withdrawal of the accumulated contributions, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

Normal retirement age is age 50.

4. Normal Service Retirement Allowance

Eligibility: For individuals who are members on or before June 30, 2011, 22 years of eligibility service or attainment of age 50. For individuals who become members on or after July 1, 2011, 25 years of eligibility service or attainment of age 50. Retirement at age 60 is mandatory for all but the Secretary of State Police. Allowance: For individuals who are members on or before June 30, 2011, 2.55% of average final compensation for the three highest years as a member. For individuals who become members on or after July 1, 2011, 2.55% of average final compensation for the five highest years as a member. Maximum benefit is 71.4% of average final compensation.

5. Early Retirement Allowance

Not applicable to the State Police Retirement System.

6. Disability Retirement Allowance

<u>Ordinary</u>

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is likely to be permanent.

Allowance: The allowance is the greater of a normal service retirement allowance (as described above) or 35% of the member's average final compensation.

Special (Accidental)

Eligibility: Total and permanent incapacity for duty as certified by the medical board arising out of or in the course of the actual performance of duty without willful negligence by the member.

Allowance: For members who are under normal retirement age, the benefit is the lesser of either the member's average final compensation, or the sum of 66.67% of the member's average final compensation and an annuity that is actuarially equivalent to the member's accumulated contributions. Members who are at least normal retirement age are entitled either to the benefit as calculated for members under normal retirement age, or a normal service retirement allowance, whichever is greater.

7. Death Benefits

<u>Normal Death Benefit – Return of Accumulated</u> <u>Contributions</u>

Eligibility: Death while employed as a member and less than one year of eligibility service. A normal death benefit may be not paid if a special death benefit is paid for that death.

Benefit: Lump sum payment of member's accumulated member contributions to the member's designated beneficiary or, if there is no designated beneficiary, to the member's estate.

<u>Normal Death Benefit – Return of Accumulated</u>

Contributions and Annual Earnable Compensation Eligibility: Death while employed as a member and at least one year of eligibility service. A normal death benefit may not be paid if a special death benefit is paid for that death.

Benefit: Lump sum payment of member's accumulated contributions and an amount equal to the member's annual earnable compensation at the time of death to the member's designated beneficiary or, if there is no designated beneficiary, to the member's estate.

Special Death Benefit For Death While Employed And Not In Performance Of Duty

Eligibility: Death while employed as a member, without member's willful negligence, and not in the performance of duty. Member has more than two years of eligibility service. The member is survived by a spouse, a child under the age of 26, a disabled child, or a dependent parent.

Benefit: Accumulated member contributions plus an allowance equal to 50% of the member's average final compensation.

Beneficiary: Payment of the member's accumulated member contributions shall be paid to the member's designated beneficiary, or otherwise to the member's estate. An allowance equal to 50% of the member's average final compensation shall be made to the surviving spouse; however, if there is no surviving spouse or spouse dies before youngest child reaches age 26, 50% of average final compensation continues prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment is made to dependent parents. If none of the above conditions is met, the normal death benefit is paid to the designated beneficiary.

Special Death Benefit For Death In The Performance Of Duty

Eligibility: Death while employed as a member, without member's willful negligence, and in the performance of duty. The member is survived by a spouse, a child under the age of 26, a disabled child, or a dependent parent.

Benefit: Accumulated member contributions plus an allowance equal to 66.67% of the member's average final compensation.

Beneficiary: Payment of the member's accumulated member contributions shall be paid to the member's designated beneficiary, or otherwise to the member's estate. An allowance equal to 66.67% of the member's average final compensation shall be made to the surviving spouse; however, if there is no surviving spouse or spouse dies before youngest child reaches age 26, 66.67% of average final compensation continues prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment is made to dependent parents. If none of the above conditions is met, the normal death benefit is paid to the designated beneficiary.

Waiver of Special Death Benefit

Before the payment of any special death benefit is made under this section, if all individuals eligible for a special death benefit elect to waive the payment of the special death benefit, a normal death benefit is paid to the member's designated beneficiary, or otherwise to the member's estate.

Death Benefit For Vested Former Member

If a member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

Eligibility: For individuals who became members on or before June 30, 2011, five years of eligibility service and separation from employment other than by death or retirement. For individuals who become members on or after July 1, 2011, 10 years of eligibility service and separation from employment other than by death or retirement.

Allowance: Service retirement allowance payable at normal retirement age, provided the member does not withdraw the member's accumulated contributions.

9. Cost-of-Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Any COLAs are effective July 1, for all allowances which have been in payment for one year.

Uncapped compounded COLAs are applied to all benefits attributable to creditable service earned on or before June 30, 2011.

For an allowance based on creditable service earned on or after July 1, 2011, the COLA adjustment is capped at 2.5% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was greater than or equal to the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year. The adjustment is capped at 1% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was less than the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

Retirees and beneficiaries receiving a retirement allowance on or before June 30, 1999, who receive an annual adjustment to their benefit ranging from \$1,200 to \$2,100 receive separate COLAs on this adjustment commencing effective July 1, 2000.

10. Optional Forms of Payment

If, at the time of death, the retiree is married, the retiree's spouse is entitled to receive a survivor benefit consisting of 80% of the retiree's retirement allowance. If there is no surviving spouse or upon the death of the surviving spouse, payment of the survivor benefit is divided equally among any children of the deceased retiree under the age of 18 years, until each child dies or becomes age 18. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. If there is no spouse at time of retirement, member may select an optional allowance.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

<u>11. Reduction for Benefits Payable Under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. State Police Retirement System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits. Offsets do not include any calculation of cost-of-living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation Commission if a recipient is receiving an ordinary disability payment from the State Police Retirement System for the same injury or illness. Any offset taken for an accidental disability from the State Police Retirement System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

12. Deferred Retirement Option Program (DROP)

Eligibility: Members who joined the State Police Retirement System on or before June 30, 2011 are eligible to participate in the DROP if they are less than 60 years old and have at least 22 but less than 30 years of eligibility service. Members who join the State Police System on or after July 1, 2011 are eligible to participate in the DROP if they are less than 60 years old and have at least 25 but less than 30 years of eligibility service.

Participation: An eligible member may participate in the DROP for the lesser of 7 years, the difference between 30 years and the member's creditable service, the difference between 60 years and the member's age on date of election to participate, or a term selected by the member. Participation also ends if the participant dies, is terminated from employment, accepts a special disability retirement allowance, or submits a binding letter of resignation or notice of intent to terminate employment. Members who participate in the DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits.

Allowance: For members who entered the DROP on or before June 30, 2011, the service retirement allowance, with COLAs, is credited to an account earning interest at the rate of 6% per year, compounded monthly. For members who enter DROP on or after July 1, 2011, the service retirement allowance, with COLAs, is credited to an account earning interest at the rate of 4% per year, compounded annually. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for Special Disability benefits if incapacitated while in DROP.

Judges'	Retirement	System

A COMPOSITE PICTURE				
		2024		2023
Total Membership				
Active Vested		223		220
Active Non-Vested		99		106
Vested Former Members		8		8
Retired Members		471		468
Active Members				
Number		322		326
Average Age		57.7		57.4
Average Years of Service		8.2		8.0
Average Annual Salary	\$	190,003	\$	180,049
Retirees & Beneficiaries				
Number		471		468
Average Age		78.4		78.1
Average Monthly Benefit	\$	8,602	\$	8,143

1. Membership

Membership is a condition of employment for a judge of the Court of Appeals, Court of Special Appeals, Circuit Court, or District Court of Maryland and members of the State Workers' Compensation Commission. Membership ends if the member is separated from employment for more than four years, withdraws the member's accumulated contributions, retires, or dies.

2. Member Contributions

Members are required to make contributions of 8% of salary until they have completed 16 years of service as a member.

Contributions earn interest at 4% per year, compounded annually, until retirement or withdrawal of accumulated contributions. Non-vested members who became members of the Judges' Retirement System on or after July 1, 2012 shall not receive interest after membership ends.

3. Normal Retirement Age

Normal retirement age is age 60.

4. Retirement Allowance

Eligibility: An individual who is a member of the Judges' Retirement System before July 1, 2012 is entitled to a retirement allowance: (1) on termination of service if the member is at least age 60; (2) on resignation for disability and recommendation of the medical board, (3) when retired by order of the Court of Appeals, or (4) at the age of 60 years. An individual who becomes a member of the Judges' Retirement System on or after July 1, 2012 is entitled to a retirement allowance: (1) on termination of service if the member is at least 60 and has at least 5 years of eligibility service; (2) on resignation for disability and recommendation of the medical board, (3) when retired by order of the Court of Appeals if the member has at least 5 years of eligibility service; (4) at the mandatory retirement age required by the Maryland Constitution with less than five years of service, if the member has eligibility service equal to the mandatory retirement age minus the member's age when the member joined the Judges' Retirement System; or (5) at the age of 60, if the former member's termination of service occurred earlier and the former member had at least five years of eligibility service when the former member terminated service.

Allowance: Generally, the retirement allowance equals 66.67% of salary payable in that fiscal year to member holding same level of judicial position that retiree held on termination of service. For members with less than 16 years of service credit, the benefit is reduced based on the ratio of years of service credit to 16.

5. Early Retirement Allowance

Not applicable to the Judges' Retirement System.

6. Disability Retirement Allowance

Eligibility: Certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is likely to be permanent.

Allowance: A retirement allowance payable immediately. However, if a judge has at least three years of service credit as a member, the allowance will be at least .333% of the judge's salary at the time of retirement.

7. Death Benefits

Monthly Allowance

Eligibility: Death of a judge or former judge at any age, leaving a surviving spouse or children under the age of 26, or a child who is disabled, regardless of age.

Allowance: 50% of the pension that would have been payable to the judge or former judge as of the date of death, as if the judge or former judge was eligible to receive a retirement allowance, is payable to surviving spouse. If there is no spouse, payment is divided equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age.

Lump Sum

On death of a member who is not survived by a spouse or children, the Board of Trustees shall pay the member's accumulated contributions and an amount equal to the member's annual salary at time of death to the member's designated beneficiary. If the member has designated more than one beneficiary, this lump-sum death benefit shall be divided equally among the beneficiaries. If a member's service is terminated by death and the member leaves no spouse, child under the age of 18 years, or designated beneficiary, the member's accumulated contributions shall be paid to the member's estate.

Special Death Benefit

Eligibility: Death arising out of or in the course of the actual performance of duty without willful negligence by the member.

Benefit: A return of the member's accumulated contributions and an allowance equal to two-thirds of the salary of a member holding the same judicial position as the member who was killed in the line of duty, payable to a surviving spouse, the decedent's children, or dependent parents. Children of deceased members receiving a special death benefit will continue to receive their benefit, prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. The annuity shall be reallocated among the remaining eligible children. Disabled children receiving a special death benefit may receive a special death benefit as long as they remain disabled, regardless of age.

8. Vested Allowance

Eligibility: Individuals who became members before July 1, 2012, are eligible once they have both separated from service and reached age 60 years. Individuals who become members on or after July 1, 2012, are eligible once they have separated from service, reached age 60 years, and earned five years of eligibility service. Also eligible are individuals who became members on or after July 1, 2012 who are required to retire due to mandatory retirement and have less than 5 years of service at that time, if they have an amount of eligibility service equal to constitutional mandatory retirement age minus the member's age when the individuals first become members of the System.

Allowance: Same as allowance payable at age 60.

In lieu of a deferred vested allowance pension, a former judge may elect to withdraw accumulated contributions following the judge's termination of service.

9. Cost-of-Living Adjustments (COLA)

Generally, allowances are recalculated each time the salary for a sitting judge from the Court from which the judge retired increases.

NOTE: Magistrates who retire from the Judges' Retirement System receive COLA allowances equal to the percentage increase in salary provided to judges of the Circuit Court.

10. Optional Forms of Payment

For survivor allowance payable to a member's surviving spouse, children under age 26, or disabled children, see Death Benefits section above. A judge or former judge, who at the time of retirement, does not have a spouse or child under the age of 18 years, may elect one of the following optional forms of payment:

- Option 1: Lump-sum equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

A retiree who has elected one of these optional forms of allowance may not change the designated beneficiary.

Law Enforcement Officers' Pension System

A COMPOSITE PICTURE				
		2024		2023
Total Membership				
Active Vested		1,469		1,398
Active Non-Vested		1,524		1,479
Vested Former Members		309		313
Retired Members		2,608		2,512
Active Members				
Number		2,993		2,874
Average Age		40.8		40.7
Average Years of Service		10.4		10.5
Average Annual Salary	\$	89,347	\$	84,105
Retirees & Beneficiaries				
Number		2,608		2,512
Average Age		63.6		63.1
Average Monthly Benefit	\$	3,396	\$	3,300

A. PENSION PROVISIONS

1. Membership

Membership generally is a condition of employment for all law enforcement officers who are employees of the State as provided in SPP § 26-201, or whose employers are participating governmental units who elect to have their law enforcement officers or firefighters/paramedics participate in the Law Enforcement Officers' Pension System.

2. Member Contributions

Members are required to contribute 7% of earnable compensation. Beginning July1, 2020, no member contributions are required after 32 years and six months of service.

Contributions earn interest at 5% per year, compounded annually, until retirement, withdrawal of accumulated contributions, death, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

Normal retirement age is age 50.

4. Normal Service Retirement Allowance

Eligibility: 25 years of eligibility service or attainment of age 50.

Allowance: For individuals who became members on or before June 30, 2011, 2.0% of average final compensation for the three highest consecutive years as a member. For individuals who became members on or after July 1, 2011, 2.0% of average compensation for the five highest consecutive years as a member. For members who retired before July 1, 2018, the maximum benefit was 60% of average final compensation. For members who retire on or after July 1, 2018, the maximum benefit is 65% of average final compensation.

5. Early Retirement Allowance

Not applicable to the Law Enforcement Officers' Retirement System.

6. Disability Retirement Allowance Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is likely to be permanent. Allowance: Service retirement allowance computed on the basis that service continues until age 50 without any change in rate of earnable compensation. If disability occurs after age 50, the benefit is based on creditable service at time of retirement.

Accidental

Eligibility: Total and permanent incapacity for duty as certified by the medical board arising out of or in the course of the actual performance of duty, without willful negligence.

Allowance: The benefit is 66.7% of average final compensation plus an annuity provided by accumulated member contributions. The maximum benefit cannot be greater than the average final compensation.

7. Death Benefits

<u>Normal Death Benefit – Return of Accumulated</u> <u>Contributions</u>

Eligibility: Death while employed as a member and less than one year of eligibility service. A normal death benefit may not be paid if a special death benefit is paid for that death.

Benefit: Lump sum payment of member's accumulated member contributions to the member's designated beneficiary or, if there is no designated beneficiary, to the member's estate.

Normal Death Benefit – Return of Accumulated Contributions and Annual Earnable Compensation Eligibility: Death while employed as a member and at least one year of eligibility service. A normal death benefit may not be paid if a special death benefit is paid for that death.

Benefit: Lump sum payment of member's accumulated member contributions and an amount equal to the member's annual earnable compensation at the time of death to the member's designated beneficiary or, if there is no designated beneficiary, to the member's estate.

Special Death Benefit For Death While Employed And Not In Performance Of Duty

Eligibility: Death while employed as a member, without the member's willful negligence, and not in the performance of duty. The member is survived by a spouse, a child under the age of 26, a disabled child, or a dependent parent.

Benefit: Accumulated member contributions plus an allowance equal to 50% of the ordinary disability allowance the member would have received at the time of the member's death.

Beneficiary: Payment of the member's accumulated member contributions shall be paid to the member's designated beneficiary, or otherwise to the member's estate. An allowance equal to 50% of the ordinary disability allowance the member would have received at the time of the member's death shall be made to the surviving spouse; however, if there is no surviving spouse or spouse dies before youngest child reaches age 26, 50% of average final compensation continues prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment is made to dependent parents. If none of the above conditions is met, the normal death benefit is paid to the designated beneficiary.

Special Death Benefit For Death In The Performance Of Duty

Eligibility: Death while employed as a member, without the member's willful negligence, and not in the performance of duty. The member is survived by a spouse, a child under the age of 26, a disabled child, or a dependent parent.

Benefit: Accumulated member contributions plus an allowance equal to 66.67% of the member's average final compensation.

Beneficiary: Payment of the member's accumulated member contributions shall be paid to the member's designated beneficiary, or otherwise to the member's estate. An allowance equal to 66.67% of the member's average final compensation be made to the surviving spouse; however, if there is no surviving spouse or spouse dies before youngest child reaches age 26, 66.67% of average final compensation continues prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment is made to dependent parents. If none of the above conditions is met, the normal death benefit is paid to the designated beneficiary.

Waiver of Special Death Benefit

Before the payment of any special death benefit is made under this section, if all individuals eligible for a special death benefit elect to waive the payment of the special death benefit, a normal death benefit is paid to the member's designated beneficiary, or otherwise to the member's estate.

Death Benefit For Vested Former Member

If a member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

Eligibility: For individuals who are members on or before June 30, 2011, five years of eligibility service. For individuals who become members on or after July 1, 2011, 10 years of eligibility service.

Allowance: Accrued retirement allowance payable at age 50 if the member does not withdraw the member's accumulated member contributions.

9. Cost-of-Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Any COLAs are effective July 1, for allowances which have been in payment for one year. Effective July 1, 2000, for an allowance based on creditable service earned before July 1, 2011, the adjustment is capped at a maximum 3% compounded and is applied to all allowances which have been in payment for one year.

For an allowance based on creditable service earned on or after July 1, 2011, the COLA adjustment is capped at 2.5% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was greater than or equal to the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year. The adjustment is capped at 1% if, for the calendar year ending December 31 in the previous fiscal year, the several systems' total investment performance was less than the assumed rate of investment return established by the Board of Trustees and in effect as of December 31 of the preceding fiscal year.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

10. Optional Forms of Payment

If, at the time of death, the retiree is married, the retiree's spouse is entitled to receive a survivor benefit consisting of 50% of the retiree's basic allowance. If there is no surviving spouse or upon the death of the surviving spouse, payment of the survivor benefit is divided equally among any children of the deceased retiree under the age of 26 years, until each child dies or becomes age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. If there is no spouse at time of retirement, member may select an optional allowance.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.

Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

<u>11. Reduction for Benefits Payable under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. Law Enforcement Officers' Pension System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits. Offsets do not include any calculation of cost-of-living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation Commission if a recipient is receiving an ordinary disability payment from the Law Enforcement Officers' Pension System for the same injury or illness. Any offset taken for an accidental disability from the Law Enforcement Officers' Pension System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

12. Deferred Retirement Option Plan (DROP)

Eligibility: Members are eligible to participate in the DROP if they have at least 25 and less than 30 years of creditable service.

Participation: An eligible member may participate in the DROP for the lesser of 7 years, the difference between 30 years and the member's creditable service, or a term selected by the member. Participation also ends if the participant dies, is terminated from employment, accepts an accidental disability retirement allowance, or submits a binding letter of resignation or notice of intent to terminate employment. Members who participate in the DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits.

Allowance: For members who entered the DROP on or before June 30, 2011, the service retirement allowance, with annual COLAs, is credited to an account earning interest at the rate of 6% per year, compounded monthly. For members who enter DROP on or after July 1, 2011, the service retirement allowance, with annual COLAs, is credited to an account earning interest at the rate of 4% per year, compounded annually. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for accidental disability benefits if incapacitated while in DROP.

B. Members Transferring from the Employees' Retirement System (1)

1. Membership

The retirement tier was closed to new participants effective January 1, 2005.

2. Member Contributions

Members who transferred from Employees' Retirement System (Plan A) are required to contribute 7% of earnable compensation. Members who transferred from the Employees' Retirement System (Plan B) contribute 5% of earnable compensation. Contributions earn interest at 4% per year, compounded annually, until retirement, withdrawal of accumulated contributions, death, or the end of membership for former members who are not entitled to receive a vested allowance.

3. Normal Retirement Age

Normal retirement age is age 50.

4. Normal Service Retirement Allowance

Eligibility: 25 years of eligibility service or attainment of age 50.

Allowance: 2.3% of average final compensation for the three highest years as a member for each of the first 30 years of creditable service, plus 1.0% of average final compensation for each additional year.

5. Early Retirement Allowance

Not applicable to this System.

6. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is likely to be permanent.

Allowance: The greater of normal service retirement allowance or 25% of average final compensation.

<u>Accidental</u>

Eligibility: Total and permanent incapacity for duty as certified by the medical board arising out of or in the course of the actual performance of duty, without willful negligence.

Allowance: The benefit is 66.7% of average final compensation plus an annuity that is the actuarial equivalent of accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

⁽¹⁾ This section B outlines the provisions applicable to members of LEOPS who transferred from the Employees' Retirement System before January 1, 2005 and were subject to Selection A or Selection B and did not elect to participate in the contributory law enforcement officers' modified benefit.

7. Death Benefits

<u>Normal Death Benefit – Return of Accumulated</u> <u>Contributions</u>

Eligibility: Death while employed as a member and less than one year of eligibility service. A normal death benefit may not be paid if a special death benefit is paid for that death.

Benefit: Lump sum payment of member's accumulated member contributions to the member's designated beneficiary or, if there is no designated beneficiary, to the member's estate.

<u>Normal Death Benefit – Return of Accumulated</u> <u>Contributions and Annual Earnable Compensation</u>

Eligibility: Death while employed as a member and at least one year of eligibility service. A normal death benefit may not be paid if a special death benefit is paid for that death.

Benefit: Lump sum payment of member's accumulated member contributions and an amount equal to the member's annual earnable compensation at the time of death to the member's designated beneficiary or, if there is no designated beneficiary, to the member's estate.

Special Death Benefit For Death While Employed And Not In Performance Of Duty

Eligibility: Death while employed as a member, without the member's willful negligence, and not in the performance of duty. The member is survived by a spouse, a child under the age of 26, a disabled child, or a dependent parent.

Benefit: Accumulated member contributions plus an allowance equal to 50% of the ordinary disability allowance the member would have received at the time of the member's death.

Beneficiary: Payment of the member's accumulated member contributions shall be paid to the member's designated beneficiary, or otherwise to the member's estate. An allowance equal to 50% of the ordinary disability allowance the member would have received at the time of the member's death shall be made to the surviving spouse; however, if there is no surviving spouse or spouse dies before youngest child reaches age 26, 50% of average final compensation continues prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment is made to dependent parents. If none of the above conditions is met, the normal death benefit is paid to the designated beneficiary.

Special Death Benefit For Death In The Performance Of Duty

Eligibility: Death while employed as a member, without the member's willful negligence, and not in the performance of duty. The member is survived by a spouse, a child under the age of 26, a disabled child, or a dependent parent.

Benefit: Accumulated member contributions paid plus an allowance equal to 66.67% of the member's average final compensation.

Beneficiary: Payment of the member's accumulated member contributions shall be paid to the member's designated beneficiary, or otherwise to the member's estate. An allowance equal to 66.67% of the member's average final compensation be made to the surviving spouse; however, if there is no surviving spouse or spouse dies before youngest child reaches age 26, 66.67% of average final compensation continues prorated equally among the eligible children. A child is eligible for a prorated share of the annuity until reaching age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. In cases where a deceased member is not survived by a spouse or children, payment is made to dependent parents. If none of the above conditions is met, the normal death benefit is paid to the designated beneficiary.

Waiver of Special Death Benefit

Before the payment of any special death benefit is made under this section, if all individuals eligible for a special death benefit elect to waive the payment of the special death benefit, a normal death benefit is paid to the member's designated beneficiary, or otherwise to the member's estate.

Death Benefit For Vested Former Member

If a member is not active, but is eligible for a vested allowance, the member's designated beneficiary or estate is eligible to receive only accumulated member contributions at time of death.

8. Vested Allowance

Eligibility: Five years of eligibility service and separation from employment other than by death or retirement.

Allowance: Service retirement allowance payable at normal retirement age if the member does not withdraw the member's accumulated member contributions.

9. Cost-of-Living Adjustments (COLA)

Retirement allowances may be adjusted each year based on the Consumer Price Index (CPI). Any COLAs are effective July 1, for all allowances which have been in payment for one year.

For an allowance for members that elected Selection A (contributing 7% of earnable compensation), uncapped COLA is compounded annually. For an allowance for members that elected Selection B (contributing 5% of earnable compensation), the COLA is capped at a maximum 5% compounded annually.

In years in which COLAs would be less than zero due to a decline in the CPI, retirement allowances will not be adjusted. COLAs in succeeding years are adjusted until the difference between the negative COLA that would have applied and the zero COLA is fully recovered.

10. Optional Forms of Payment

If, at the time of death, the retiree is married, the retiree's spouse if entitled to receive a survivor benefit consisting of 50% of the retiree's basic allowance. If there is no surviving spouse or upon the death of the surviving spouse, payment of the survivor benefit is divided equally among any children of the deceased retiree under the age of 26 years, until each child dies or becomes age 26. If the child is disabled, the benefit will continue as long as the child remains disabled, regardless of age. If there is no spouse at time of retirement, member may select an optional allowance.

- Option 1: Lump-sum refund equal to excess of present value of basic retirement allowance at date of retirement minus total amount of payments made to date of death excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 2: 100% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 100% of the retiree's reduced allowance for the life of the designated beneficiary. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 3: 50% joint and survivor annuity, which pays the retiree's surviving designated beneficiary 50% of the retiree's reduced allowance for the life of the designated beneficiary.
- Option 4: Lump-sum refund equal to value of accumulated member contributions minus total portion of monthly payments attributed to member contributions made to date of death, excluding any cost of living adjustments for retirees before July 1, 2017.
- Option 5: 100% "pop-up" joint and survivor annuity, which pays the designated beneficiary 100% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree. The designated beneficiary cannot be more than 10 years younger than the retiree unless the beneficiary is the retiree's spouse or disabled child.
- Option 6: 50% "pop-up" joint and survivor annuity, which pays the designated beneficiary 50% of the retiree's reduced allowance after the retiree's death or returns the retiree's benefit to the unreduced basic allowance if beneficiary predeceases retiree.

Retirees who have selected Options 2, 3, 5, or 6 and change their designated beneficiary after they retire, will have their retirement allowance re-calculated to reflect the age of the new designated beneficiary. Retirees who elect to change their beneficiary under Options 2, 3, 5, and 6, may rescind their request to change their designated beneficiary before the second monthly allowance is paid. Retirees who rescind the change of beneficiary, will have their benefit payment amount for the next payment restored to the amount paid before the change in beneficiary was made.

<u>11. Reduction for Benefits Payable under Workers'</u> <u>Compensation</u>

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits paid or payable after retirement from injury occurring during employment by the State if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid or payable for the same period of time for which the retirement benefits are paid. Law Enforcement Officers' Pension System retirees receiving an accidental disability payment are subject to an offset if they are getting a workers' compensation payment for the same injury or illness, subject to specified limits. Offsets do not include any calculation of cost-of-living benefits that are paid on the original benefit amount. Conversely, workers' compensation payments are subject to an offset by the Workers' Compensation Commission if a recipient is receiving an ordinary disability payment from the Law Enforcement Officers' Pension System for the same injury or illness. Any offset taken for an accidental disability from the Law Enforcement Officers' Pension System will be adjusted if the retiree was originally awarded an ordinary disability retirement benefit that was later converted to an accidental disability benefit. The adjusted offset shall reflect any offset awarded to the retiree's employer by the Workers' Compensation Commission.

12. Deferred Retirement Option Program (DROP)

Eligibility: Members are eligible to participate in the DROP if they have at least 25 and less than 30 years of creditable service.

Participation: An eligible member may participate in the DROP for the lesser of 5 years, the difference between 30 years and the member's creditable service, or a term selected by the member. Participation also ends if the participant dies, is terminated from employment, accepts an accidental disability retirement allowance, or submits a binding letter of resignation or notice of intent to terminate employment. Members who participate in the DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits.

Allowance: For members who entered the DROP on or before June 30, 2011, the service retirement allowance, with annual COLAs, is credited to an account earning interest at the rate of 6% per year, compounded monthly. For members who enter DROP on or after July 1, 2011, the service retirement allowance, with annual COLAs, is credited to an account earning interest at the rate of 4% per year, compounded annually. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for Accidental Disability benefits if incapacitated while in DROP.

