STATE OF RHODE ISLAND

Employees' Retirement System

FISCAL YEAR ENDED JUNE 30, 2021



Office of the Auditor General

General Assembly

State of Rhode Island



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January 4, 2022

JOINT COMMITTEE ON LEGISLATIVE SERVICES:

SPEAKER K. Joseph Shekarchi, Chairman

Senator Dominick J. Ruggerio Senator Dennis L. Algiere Representative Christopher R. Blazejewski Representative Blake A. Filippi

We have completed our audit of the financial statements of the Employees' Retirement System of the State of Rhode Island for the fiscal year ended June 30, 2021 in accordance with Section 36-8-19 of the Rhode Island General Laws.

Our report is contained herein as outlined in the Table of Contents.

Sincerely,

Dennis E. Hoyle, CPA

Auditor General

FISCAL YEAR ENDED JUNE 30, 2021

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INDEPENDENT AUDITOR'S REPORT

JOINT COMMITTEE ON LEGISLATIVE SERVICES, GENERAL ASSEMBLY STATE OF RHODE ISLAND:

RETIREMENT BOARD OF THE EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND:

Report on the Financial Statements

We have audited the accompanying financial statements of the plans which comprise the Employees' Retirement System of the State of Rhode Island (the System) as of June 30, 2021 and for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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

Joint Committee on Legislative Services, General Assembly Retirement Board of the Employees' Retirement System

Opinions

In our opinion, the financial statements of the plans referred to above present fairly, in all material respects, the financial position of the plans within the System as of June 30, 2021, and the changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As described in Note 1, the financial statements of the System present only the pension trust funds of the State of Rhode Island and Providence Plantations (the State) and do not purport to, and do not present fairly the financial position of the State, as of June 30, 2021 and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

As described in Note 5, the fair values of certain investments (hedge funds, private equity, real estate, infrastructure, crisis protection class - trend following investments, and emerging markets debt - collective unit trust) representing 34.6% of assets within the pooled investment trust, have been estimated by management in the absence of readily determinable fair values. Management's estimates are based on information provided by the fund managers or general partners.

As described in Note 8, the fiduciary net position for the RIJRFT plan represents only 6.0% of the total pension liability of that plan at the June 30, 2021 measurement date. Employer contributions were significantly less than actuarially determined amounts. Additional employer contributions will be required to provide benefits to plan members.

Our opinions are not modified with respect to these matters.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 through 11 and other required supplementary information as listed in the table of contents and pages 53 through 74 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Joint Committee on Legislative Services, General Assembly Retirement Board of the Employees' Retirement System

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The supplementary information, such as the Schedules of Investment, Administrative, and Consultant Expenses, is presented for purposes of additional analysis and is not a required part of the basic financial statements.

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

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have issued a report dated December 22, 2021 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 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.

Dennis E. Hoyle, CPA Auditor General

December 22, 2021

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Management's Discussion and Analysis

Management's Discussion and Analysis

Management of the Employees' Retirement System of the State of Rhode Island (the System) provides this Management's Discussion and Analysis of their financial performance for the readers of the System's financial statements. This narrative provides an overview of the System's financial activity for the fiscal year ended June 30, 2021. This analysis is to be considered in conjunction with the financial statements to provide an objective analysis of the System's financial activities based on the status of the System and issues currently facing management.

Understanding the Employees' Retirement System Financial Statements

The System administers seven defined benefit pension plans. State employees and teachers are combined into one cost-sharing plan while teachers' survivors benefits are provided from an additional cost-sharing plan. Two plans cover state police and two additional plans cover judges. Municipal employees are covered under a separate agent plan administered by the System. The System also administers a defined contribution plan for certain state employees, teachers, and employees of participating municipalities.

The Statements of Fiduciary Net Position provide a snapshot of the financial position of the System at June 30, 2021. The Statements of Changes in Fiduciary Net Position summarize the additions and deductions that occurred during the fiscal year.

The *Notes to the Financial Statements* provide additional information essential to a full understanding of the financial statements.

The Required Supplementary Information consists of schedules and related notes, which over time will be built to present 10 years of historical data. These schedules present each plan's net pension liability (asset) and changes in the net pension liability (asset) between years. A schedule of investment returns presents the annual money-weighted return for each defined benefit plan. A schedule of contributions is presented for each plan, which details required and actual contributions to the plan including covered payroll information.

Financial Highlights for the Fiscal Year Ended June 30, 2021

- □ The System's fiduciary net position increased by \$2.4 billion from \$9.8 billion at June 30, 2020 to \$12.2 billion at June 30, 2021.
- □ Total pension benefits paid to members from the defined benefit plans were \$979.4 million, an increase of \$10.5 million or 1.08% when compared to the fiscal year ended June 30, 2020.
- □ Contributions to all defined benefit plans from both employers and employees at June 30, 2021 were \$680 million, an increase of \$5.5 million or 0.8% compared to the fiscal year ended June 30, 2020.
- □ Total employee and employer contributions into the System's defined contribution plan were \$131.6 million at June 30, 2021, an increase of \$151 thousand.
- □ Total distributions paid to members from the defined contribution plan were \$32.1 million.
- □ The net income from investing activities within the defined benefit plans (Pooled Investment Trust) was \$2.3 billion for the fiscal year ended June 30, 2021. Investment gains within the defined contribution plan totaled \$344.5 million.
- □ Fiduciary net position as a percentage of the total pension liability for each of the defined benefit plans increased compared to the prior measurement date primarily due to increased investment income for fiscal 2021.

Management's Discussion and Analysis

Financial Analysis

The System provides retirement and disability benefits from the defined benefit plans to State employees, public school teachers, participating municipal general and public safety employees, state police officers and judges. These benefits are funded through member and actuarily-determined employer contributions and investment income. The fiduciary net position is available to satisfy the financial obligations to members, retirees, and beneficiaries. The System also provides retirement benefits through a defined contribution plan which is intended to supplement retirement benefits available through the defined benefit plans for certain members as part of the System's "hybrid" benefit structure.

The total net position restricted for pensions at June 30, 2021 increased to \$12.2 billion when compared to \$9.8 billion at June 30, 2020.

The following tables illustrate the condensed Net Position and Condensed Changes in Net Position for ERSRI for the fiscal years ended June 30, 2021 and June 30, 2020.

Assets, Liabilities and Fiduciary Net Position – All Plans (in millions)				
	<u>June 30, 2021</u>	June 30, 2020		
Assets:				
Cash and cash equivalents	\$ 9.5	\$ 7.5		
Investments	12,121.1	9,691.0		
Contribution and other receivables	46.5	61.1		
Total assets	12,177.1	9,759.6		
Liabilities:				
Accounts payable	6.4	8.1		
Total liabilities	6.4	8.1		
Fiduciary Net Position:	<u>\$12,170.7</u>	<u>\$ 9,751.5</u>		

Total assets increased by \$2.4 billion, or 24.8%, for the fiscal year ending June 30, 2021, when compared to fiscal year ending June 30, 2020. Along with the increase across most asset classes, fiscal year 2021 saw unprecedented market changes as results of continued vaccine adoption, ongoing monetary and fiscal support, elevated CPI, strained supply chain and heightened geopolitical tensions throughout the world.

Cash and cash equivalents at June 30, 2021 increased \$2.0 million when compared to fiscal year ending June 30, 2020. The increase in the total fiduciary net position can primarily be attributed to higher investment earnings. The increase of \$2.4 billion, or 25.1%, of investments can be attributed to an increase in the global markets and the allocation policy of the portfolio. Contributions and other receivables decreased by \$14.6 million, or 23.9%, due to the timing of amounts due from employers at June 30, 2021.

Total liabilities decreased \$1.7 million, or 20.8%, for the fiscal year ending June 30, 2021 due to the timing of what was owed to vendors.

Management's Discussion and Analysis

Summary of Changes in Fiduciary Net Position – All Plans (in millions)				
	Year Ended <u>June 30, 2021</u>	Year Ended June 30, 2020		
Additions:				
Contributions	\$ 811.9	\$ 806.2		
Net investment gain	2,634.3	364.5		
Service Credit Transfers	18.2	0.9		
Total Additions	<u>3,464.4</u>	<u>1,171.6</u>		
Deductions:				
Benefits and distributions	1,011.5	992.6		
Refunds of contributions	4.8	6.7		
Administrative expenses	10.7	9.8		
Service Credit Transfers	18.2	0.9		
Total Deductions	1,045.2	1,010.0		
Increase in Net Position:	2,419.2	161.6		
Fiduciary Net Position:				
Beginning of year	9,751.5	<u>9,589.9</u>		
End of year	<u>\$ 12,170.7</u>	<u>\$ 9,751.5</u>		

Additions to Net Position

The revenues required to fund retirement and disability benefits for the defined benefit plans are accumulated from the contributions from employees and employers, as well as investment earnings. Employee and employer contribution revenue at June 30, 2021 was \$566.2 million for the defined benefit plan, an increase of 2.4% when compared to \$552.9 million at June 30, 2020. Employee and employer contributions to the defined contribution plan was \$131.6 million at June 30, 2021, an increase of 0.11% when compared to \$131.4 million at June 30, 2020.

The State of Rhode Island's share of contributions for the teachers' defined benefit plan was \$112.6 million for fiscal 2021, an increase of 3.7% when compared to \$108.6 million for fiscal 2020.

Contributions from employees and employers (except for the RIJRFT and SPRFT) are based on covered payroll. During fiscal year 2021 the covered payroll for each trust experienced an increase when compared to fiscal 2020. Also, contribution rates for the members are prescribed in Rhode Island General Law and fixed by statute. The employer contributions are actuarially determined through annual funding valuations and are adjusted accordingly to meet the financial obligations of each Trust.

ERSRI recognized \$2.6 billion in net investment gains at June 30, 2021. Improvement in the global equity and private equity were the primary factors driving the increase in the Net Position. The investment portfolio for the defined benefit plan recognized a net return of 25.60% at June 30, 2021.

Management's Discussion and Analysis

Deductions from Net Position

ERSRI was established to administer the funds of each Trust in order to provide lifetime retirement, survivor, and disability benefits to its membership. The primary categories that reduce the net position are benefit payments and distributions, refunds of contributions to members exiting the System, and the administrative expenses to operate ERSRI.

Benefits and distributions to members from the defined benefit plans at June 30, 2021 were \$979.4 million, an insignificant difference of less than 1.1% when compared benefits at June 30, 2020. There was a moderate cost-of-living increase to eligible employees, increase in the number of retirees, and the increase of higher average salaries of new retirees.

Distributions to members from the defined contribution plan at June 30, 2021 were \$32 million, an increase of 35.4% when compared to \$23.7 million at June 30, 2020. The increase is the result of the increased number of retirees eligible to elect distributions from this plan. The plan was created on July 1, 2012 for eligible members that did not have 20 years of service credit at June 30, 2012. Distributions are expected to increase as this plan matures and becomes a more significant portion of a member's retirement portfolio within ERSRI.

Refunds of contributions from the defined benefit plan at June 30, 2021 were \$4.8 million, a decrease of 28.3% when compared to \$6.7 million at June 30, 2020. The decrease in refunds is the result of a decrease in the number and dollar value of refund requests from terminated members.

Administrative expenses for both the defined benefit and defined contribution plans at June 30, 2021 were \$10.7 million, an increase of 8.6% when compared to \$9.8 million at June 30, 2020. The increase in fiscal year 2021 is moderate in nature. Details of administrative expenses are listed in the *Schedule of Administrative Expenses* in the Supplementary Information section of this report.

Investments

The State Investment Commission (SIC) establishes long-term asset allocation policy, selects managers, and monitors investment performance of the plan. An asset allocation study is conducted every two to four years to identify an optimal diversified investment portfolio that maximizes return within an acceptable level of risk. As long-term investors, the SIC has committed to the strategic asset allocation that has been developed as part of a comprehensive asset allocation study. The asset allocation study incorporates return expectations, risks and correlations associated with each asset class, as well as the unique profile and objectives of the System.

The SIC seeks to achieve the targeted investment return set by the Retirement Board, while minimizing risk and satisfying the plan's need for steady cash flows. As a mature defined benefit System where distributions exceed contributions, the System must balance its short-term cash flow requirements with the much longer time horizon of its total obligations. Diversification across asset classes that respond differently to different market environments is a key tool used by the SIC to seek strong long-term returns. The allocation of assets among stocks, bonds, and alternative investments can have a significant impact on risk-adjusted investment performance.

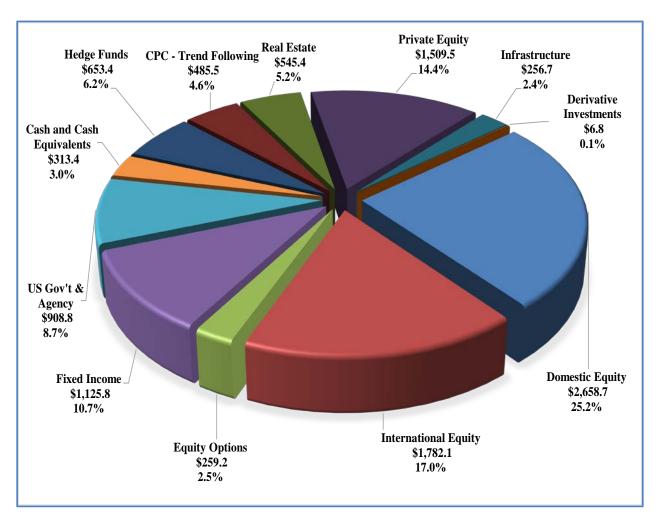
During fiscal year 2021, the SIC continued to execute on its "Back to Basics" strategy, which emphasizes a diversified portfolio that seeks to earn an appropriate rate of return, protect the fund in the event of a significant equity market drawdown, and provide liquidity for the ongoing payment to the beneficiaries of the system. The SIC completed an asset allocation review in April 2021, which resulted in

Management's Discussion and Analysis

a new 2% target allocation to collateralized loan obligations (CLOs), an increase in the target allocations to real assets, and the elimination of the target allocations to TIPS, REITs, and MLPs. The transition to the new allocation targets started in FY 2021 and continued into FY 2022.

Rhode Island maintains one of the most comprehensive expense disclosure policies in the nation. Since 2015, Rhode Island has only invested with fund managers who agree to have their performance and expenses published regularly, a policy that has become a leading practice replicated by other states. In 2017, The Rhode Island General Assembly codified the disclosure policy in statute. While some investment managers selected prior to 2015 are grandfathered from the individualized reporting requirement, the Treasurer's office has requested that they voluntarily allow disclosure, which many have agreed to do. In addition to displaying the fees and expenses charged by each fund individually, this report includes a comprehensive total of all manager fees and expenses paid out of the pension system by asset class. These totals reflect fees and expenses paid to every fund, including those grandfathered funds that declined to allow individualized disclosure.

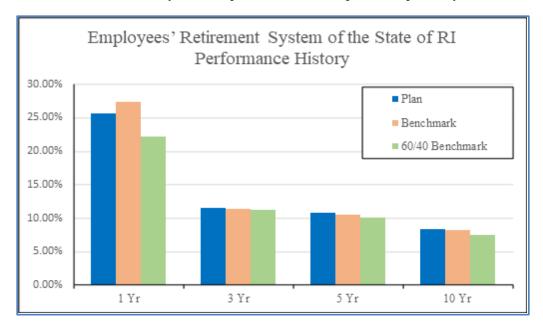
<u>Pooled Investment Trust – Asset Allocation - June 30, 2021</u> (in millions)



Management's Discussion and Analysis

Investment Performance

The System's one-year, time-weighted net rate of return was 25.60% which outperformed the 60/40 benchmark (22.19%) but lagged the composite benchmark's 27.35% return. The System's three-year annualized return was 11.57%, which outperformed both the composite benchmark (11.35%) and the 60/40 benchmark (11.23%). The five-year annualized return was 10.86%, which exceeded the composite benchmark's 10.55% return by 31 basis points and the 60/40 benchmark's 10.13% return by 73 basis points. The System's annualized return over the ten-year period was 8.28%, which outperformed the composite benchmark and 60/40 benchmark by 14 basis points and 76 basis points, respectively.



The composite benchmark ("The Benchmark") is weighted based on asset allocation targets. The Benchmark for each of the years shown in the chart reflects the asset allocation targets in place for that fiscal year and the related indices used to measure performance. As of June 30, 2021, it is comprised of the following:

- o 40.0% MSCI All Country World Net Index;
- o 11.25% ILPA All Funds Index 1Q Lag;
- o 2.25% NFI- ODCE Index 1Q Lag + 2.5%;
- o 1.5% ILPA Distressed Securities Index 1Q Lag;
- o 1.0% Alerian Master Limited Partnerships Total Return Index;
- o 1.0% MSCI U.S. REIT Index;
- o 2.0% CBOE PUT Index;
- 2.0% Emerging Market Debt Custom Benchmark (50% JPM EMBI Global Diversified Index + 50% JPM GBI-EM Global Diversified Index);
- 2.8% Liquid Credit Custom BM (50% BofA US High Yield Index + 50% Credit Suisse Leveraged Loan Index);
- o 3.2% S&P LSTA Leveraged Loan Index 1Q Lag + 3%;
- o 5.0% Credit Suisse Managed Futures (18% Vol) Liquid Index;
- o 5.0% Barclays Long Duration US Treasury Index;
- o 3.6% NFI-ODCE Index 1Q Lag;
- o 2.4% CPI 1 month lag +4%;
- o 2.0% Barclays US Treasury Inflation Notes: 1-10 Year Index;
- o 3.25% Bloomberg Barclays US Corporate Bond Index;
- o 3.25% Bloomberg Barclays Securitized MBS/ABS/CMBS Index;
- o 6.5% HFRI Fund of Funds Composite Index; and
- o 2.0% Bank of America Merrill Lynch 3-month US Treasury Bill.

The 60% global equity/40% bonds benchmark ("60/40 Benchmark") is 60% MSCI All-Country World and 40% Barclays Aggregate.

Management's Discussion and Analysis

Additional Investment Performance Reporting

The investment performance discussed in the previous section is the time-weighted return, as reported by the System's investment custodian for the Pooled Investment Trust as a whole. In accordance with GASB Statement No. 67, investment performance is also measured on a money-weighted return basis for each defined benefit retirement plan. The money-weighted returns for each defined benefit plan are disclosed in the notes to the financial statements and the required supplementary information section. The money-weighted return reflects each individual plan's specific cash inflows and outflows, as well as the overall portfolio returns.

Several of the indexes used in the construction of The Benchmark are comprised of a universe of funds within the same strategy category ("Universe Benchmark"). Some funds included in a Universe Benchmark may report returns after the benchmark has published preliminary performance data for a given period. These funds are later incorporated in subsequent calculations of a Universe Benchmark's returns in future periods, resulting in updates to the preliminary performance for that period. As a result, The Benchmark returns described in the prior section may differ from returns shown for The Benchmark in earlier ERSRI monthly performance reporting. The Benchmark returns discussed in the previous section were reported by the System's investment custodian on December 13, 2021.

The System's actuarial investment return assumption is 7.0% for all plans except the Judicial Retirement Fund Trust which uses a 2.45% investment return assumption. This return expectation is adopted by the Retirement Board on recommendation by the plan's actuary. It is based on a thirty-year horizon. The actuarial value of assets is determined based on a five-year smoothing methodology.

Fiscal 2021 investment returns within the defined contribution plan ranged from -0.37% to +61.59% depending on investment options that plan members chose from the available options.

Net Pension Liability (Asset) of the Plans within the System

Independent actuarial valuations of the System are conducted each year. Due to the implementation of Governmental Accounting Standards Board (GASB) Statement No. 67 – *Financial Reporting for Pension Plans*, the System presents the accounting measures of the net pension liability (asset) for each of the defined benefit plans. Calculation of the net pension liability (asset) of the plans is performed by the actuary in accordance with GASB requirements. The total pension liability and net pension liability are based on actuarial valuations performed as of June 30, 2020, rolled-forward to June 30, 2021 using generally accepted actuarial principles from the valuation date to the plan's fiscal year end. For one new unit within the MERS plan, the net pension liability was measured as of an actuarial valuation performed as of June 30, 2021.

This accounting measure of the net pension liability (asset) of each plan is different from the actuarial valuations performed for funding purposes and the determination of annual contributions to each of the defined benefit plans. One of the principal differences is that the accounting measure of the net pension liability at June 30, 2021 utilizes each plan's fiduciary net position, which reflects the fair value of investments at that date. For funding purposes, the actuarial valuation uses the actuarial value of assets, which reflects a five-year smoothed asset valuation.

The measurement of the net pension liabilities for all defined benefit plans, except for the RIJRFT, utilized the System's investment return assumption of 7.0%. The RIJRFT utilized Fidelity's 20-Year Municipal GO AA Bond Index rate of 1.92%. The calculation of the net pension liability (asset) was measured as of June 30, 2021.

Management's Discussion and Analysis

Two plans were overfunded at the June 30, 2021 measurement date; the Teachers' Survivors Benefit plan fiduciary net position was equal to 185.7% of the total pension liability and the Judicial Retirement Benefit Trust plan fiduciary net position was equal to 107.7% of the total pension liability.

The fiduciary net position of the ERS plan covering state employees and teachers were equal to 63.2% and 66.5% respectively of the total pension liability measure for each of those employee groups. The fiduciary net position of the two plans covering State Police was equal to 98.4% (SPRBT) and 14.0% (SPRFT) of the total pension liability measure for each of those employee groups. The SPRFT plan was created July 1, 2016 for retired state police hired before July 1, 1987 with a one-time initial contribution of \$15 million from the State and the State's commitment to fund the benefits on an actuarially determined basis rather than the previous pay-as-you-go approach. The fiduciary net position of the RIJRFT plan covering a small group of judges is funded by the State (employer) using a mostly pay-as-you-go funding approach consequently plan fiduciary net position was 6.0% of the total pension liability measure for that plan.

The fiduciary net position of the MERS plan covering general employees and municipal police and fire employees were equal to 96.0% and 91.7% respectively of the total pension liability measure for each of those employee groups.

All employers participating in the System's plans contributed 100% of their annual actuarially determined contribution during fiscal 2021, except for the State not providing the full employer contribution for the Rhode Island Judicial Retirement Fund Trust.

Future Contribution Rates

The fiscal 2022 employer contribution rates are based upon the actuarial valuations performed for funding purposes at June 30, 2019. The employer contribution rates for fiscal 2022 are 28.01% for State employees, 25.72% for Teachers, 21.82% for Judges, and 19.24% for State Police. For the Rhode Island Judicial Retirement Fund Trust and Non-Contributing State Police Retirement Fund Trust, the actuarially determined employer contribution is \$1,190,045 and \$16,387,092, respectively, for fiscal 2022.

Contacting the System's Management

This discussion and analysis presentation is designed to provide a general overview of the System's financial activity. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Employees' Retirement System, 50 Service Avenue, Warwick, RI, 02886.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Statements of Fiduciary Net Position June 30, 2021

		Defined Benefit Plans					Defined		
	ERS	TSB	MERS	SPRBT	JRBT	RIJRFT	SPRFT	Contribution Plan	Total
Assets									
Cash and cash equivalents (Note 4)	5,573,607	609,183	1,087,090	1,464,107	164,787	555,154	72,980	\$ -	\$ 9,526,908
Receivables									
Contributions	15,854,425	2,334	1,309,992	188	-	-	-	-	17,166,939
Due from State for teachers	24,092,359	-	-	-	-	-	-	-	24,092,359
Due from other plans	751,285	-	580,266	-	-	-	-	-	1,331,551
Other	901,804	5,417	135,282	2,230		36,586	20,485		1,101,804
Total receivables	41,599,873	7,751	2,025,540	2,418		36,586	20,485		43,692,653
Prepaid assets (Note 3) Investments at fair value	2,170,768	100,683	472,333	36,897	18,938	107	5,526	-	2,805,252
	7 694 122 709	423,393,408	2,077,567,291	194,867,679	101 210 620	828,154	23,412,332		10,505,412,301
Equity in pooled trust (Note 5) Defined contribution plan investments (Note 6)	7,684,123,798	423,393,406	2,077,307,291	194,007,079	101,219,639	020,134	25,412,332	- 1,615,724,999	1,615,724,999
Total investments	7,684,123,798	423,393,408	2,077,567,291	194,867,679	101,219,639	828,154	23,412,332	1,615,724,999	12,121,137,300
Total Assets	7,733,468,046	424,111,025	2,081,152,254	196,371,101	101,403,364	1,420,001	23,511,323	1,615,724,999	12,177,162,113
Liabilities									
Accounts payable	4,019,977	137,280	850,372	66,459	32,080	341	11,826	-	5,118,335
Due to other plans	580,266	-	751,285	-	-	-	-	-	1,331,551
Total Liabilities	4,600,243	137,280	1,601,657	66,459	32,080	341	11,826		6,449,886
Net position restricted for pensions	\$ 7,728,867,803	\$ 423,973,745	\$ 2,079,550,597	\$ 196,304,642	\$ 101,371,284	\$ 1,419,660	\$ 23,499,497	\$ 1,615,724,999	\$ 12,170,712,227

The accompanying notes are an integral part of this financial statement.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND Statements of Changes in Fiduciary Net Position - Fiscal Year Ended June 30, 2021

	Defined Benefit Plans					Defined			
	ERS	TSB	MERS	SPRBT	JRBT	RIJRFT	SPRFT	Contribution Plan	Total
Additions								-	
Contributions (Note 7)									
Member contributions	88,817,605	736,193	19,495,261	2,324,096	1,215,454	126,171		\$ 100,919,227	\$ 213,634,007
Employer contributions	368,034,575	736,193	60,404,125	5,240,772	2,245,823	399,138	16,387,092	30,647,375	484,095,093
New employer contributions	-	-	1,232,204	-	-	=	-		1,232,204
State contribution for teachers (Note 7c)	112,622,731	-	-	-	-	-	=	-	112,622,731
Supplemental employer contributions (Note 7d)	196,609	-	-	-	-	-	=	-	196,609
Service credit transfer payments	7,184,862	-	11,083,939	-	-	-	-	-	18,268,801
Interest on service credits purchased	74,163	-	7,674	16,003	-	-	-		97,840
Total contributions	576,930,545	1,472,386	92,223,203	7,580,871	3,461,277	525,309	16,387,092	131,566,602	830,147,285
Investment Income									
Net appreciation in fair value of investments	1,726,593,998	94,751,278	463,216,022	43,093,583	22,464,775	183,128	6,304,736	343,993,500	2,700,601,020
Interest	35,707,515	1,956,828	9,551,452	887,517	462,972	3,772	129,104		48,699,160
Dividends	53,007,004	2,905,321	14,182,857	1,318,981	687,950	5,605	186,998	483,965	72,778,681
-	1,815,308,517	99,613,427	486,950,331	45,300,081	23,615,697	192,505	6,620,838	344,477,465	2,822,078,861
Less investment expense (Note 3)	(137,320,254)	(7,558,577)	(37,172,437)	(3,460,010)	(1,800,610)	(14,703)	(476,687)	-	(187,803,278)
Net investment income	1,677,988,263	92,054,850	449,777,894	41,840,071	21,815,087	177,802	6,144,151	344,477,465	2,634,275,583
Miscellaneous revenue	10,310		855	91				4,714	15,970
Total Additions	2,254,929,118	93,527,236	542,001,952	49,421,033	25,276,364	703,111	22,531,243	476,048,781	3,464,438,838
Deductions									
Retirement benefits	825,477,028	10,650,978	111,963,725	6,871,757	3,983,311	395,828	16,268,951	-	975,611,578
Death benefits	2,899,048	-	881,725	-	-	-	-	-	3,780,773
Distributions	-	-	-	-	-	-	-	32,062,307	32,062,307
Refund of contributions	3,402,726	805,371	602,720	-	-	-	-	-	4,810,817
Service credit transfer payments	7,013,843		11,254,958	-	-	-	-	-	18,268,801
Administrative expense (Note 9)	6,816,615	356,460	1,713,745	153,233	79,690	988	18,194	1,555,397	10,694,322
Total Deductions	845,609,260	11,812,809	126,416,873	7,024,990	4,063,001	396,816	16,287,145	33,617,704	1,045,228,598
Net Increase	1,409,319,858	81,714,427	415,585,079	42,396,043	21,213,363	306,295	6,244,098	442,431,077	2,419,210,240
Net position restricted for pensions									
Beginning of year	6,319,547,945	342,259,318	1,663,965,518	153,908,599	80,157,921	1,113,365	17,255,399	1,173,293,922	9,751,501,987
End of year	\$ 7,728,867,803	\$ 423,973,745	\$ 2,079,550,597	\$ 196,304,642	\$ 101,371,284	\$ 1,419,660	\$ 23,499,497	\$ 1,615,724,999	\$ 12,170,712,227

The accompanying notes are an integral part of this financial statement.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

1. System Description and Governance

Dlan Name

The Employees' Retirement System of the State of Rhode Island (the System) acts as a common investment and administrative agent for pension benefits to be provided through seven defined benefit retirement plans and one defined contribution plan as listed below:

Tune of Dlan

Pian Name	Type of Pian
Employees' Retirement System (ERS)	Cost-sharing multiple-employer defined benefit plan
Teachers' Survivors Benefits (TSB)	Cost-sharing multiple-employer defined benefit plan
Municipal Employees' Retirement System (MERS)	Agent multiple-employer defined benefit plan
State Police Retirement Benefits Trust (SPRBT)	Single-employer defined benefit plan
Judicial Retirement Benefits Trust (JRBT)	Single-employer defined benefit plan
RI Judicial Retirement Fund Trust (RIJRFT)	Single-employer defined benefit plan
RI State Police Retirement Fund Trust (SPRFT)	Single-employer defined benefit plan
Rhode Island Defined Contribution Plan	Defined contribution plan

Each plan's assets are accounted for separately and may be used only for the payment of benefits to the members of that plan, in accordance with the terms of that plan.

The System's financial statements are included as Pension Trust Funds within the Fiduciary Funds in the Annual Comprehensive Financial Report of the State of Rhode Island and Providence Plantations. The accompanying financial statements are not intended to present the financial position and results of operations of the State.

The System is administered by the State of Rhode Island Retirement Board which was authorized, created and established in the Office of the General Treasurer as an independent retirement board to hold and administer, in trust, the funds of the retirement system. The fifteen members of the retirement board are: the general treasurer or his or her designee who shall be a subordinate within the general treasurer's office; the director of administration or his or her designee who shall be a subordinate within the department of administration; a representative of the budget office or his or her designee from within the budget office, who shall be appointed by the director of administration; the president of the league of cities and towns or his or her designee; two (2) active state employee members of the retirement system or officials from state employee unions to be elected by active state employees; two (2) active teacher members of the retirement system or officials from a teachers union to be elected by active teachers; one active municipal employee member of the retirement system or an official from a municipal employees union to be elected by active municipal employees; two (2) retired members of the retirement system to be elected by retired members of the system; and four (4) public members, all of whom shall be competent by training or experience in the field of finance, accounting or pensions; two (2) of the public members shall be appointed by the governor, one of whom shall serve an initial term of three (3) years and one of whom shall serve an initial term of four (4) years and until his or her successor is appointed and qualified; and two (2) of the public members shall be appointed by the general treasurer, one of whom shall serve an initial term of three (3) years and one of whom shall serve an initial term of four (4) years and until his or her successor is appointed and qualified. Thereafter, the term of these four (4) public members shall be for four (4) years or until their successors are appointed and qualified by the Senate.

The System's purpose is to provide retirement benefits to state employees, public school teachers, certain general and public safety municipal employees, state police officers, and judges.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

1. System Description and Governance (continued)

A summary of membership by plan follows:

	Retirees and beneficiaries	Terminated plan members entitled to but not yet receiving benefits	Active Vested	Active Non-vested	Total by Plan
Actuarial valua	tion as of June	e 30, 2020			
	J	Ź			
ERS State Employees	11,215	3,875	8,011	3,187	26,288
Teachers	11,274	4,001	11,140	2,334	28,749
TSB	611	3,460	7,217	-	11,288
MERS					
General Employees	4,880	3,231	3,988	1,948	14,047
Public Safety	1,015	232	1,181	526	2,954
SPRBT	79	53	53	198	383
JRBT	27	1	15	39	82
RIJRFT	2	-	5	-	7
SPRFT	257	-		-	257
Total by type	29,360	14,853	31,610	8,232	84,055

The defined contribution plan at June 30, 2021 included 175 employers and 38,517 plan participants.

2. Plan Membership and Benefit Provisions

Membership and benefit provisions are outlined in the Rhode Island General Laws and are subject to modification by the General Assembly. Modifications to pension benefit and eligibility provisions have been made in recent years as well as the comprehensive pension reform provisions contained in the Rhode Island Retirement Security Act enacted on November 18, 2011 and effective July 1, 2012. Legal challenges to those pension reforms were settled with the final settlement approved by the Court on July 8, 2015. The General Assembly amended the various sections of the General Laws containing those benefit provisions consistent with the terms of the settlement agreement. Those provisions are generally effective beginning July 1, 2015. The benefit provisions for each of the plans as outlined below were those in effect for fiscal 2015. Reference is made in each section to a summary of benefit and contribution provisions that will be in effect for future years.

Accordingly, specific member retirement benefit and eligibility provisions vary depending upon a number of factors including years of service, age, and vesting provisions.

The ERS was established and placed under the management of the Retirement Board for the purpose of providing retirement allowances for employees of the State of Rhode Island under the provisions of chapters 8 to 10, inclusive, of Title 36, and public school teachers under the provisions of chapters 15 to 17, inclusive, of Title 16 of the Rhode Island General Laws.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

EMPLOYEES' RETIREMENT SYSTEM (ERS)

Plan members - The plan covers most State employees other than certain personnel at the State colleges and university (principally faculty and administrative personnel). The plan also covers teachers, including superintendents, principals, school nurses, and certain other school officials in the public schools in the cities and towns. Membership in the plan is mandatory for all covered state employees and teachers. Elected officials may become members on an optional basis and legislators may participate if elected to office prior to January 1, 1995.

Certain employees of the Rhode Island Airport Corporation (hired before July 1, 1993), the Rhode Island Commerce Corporation (active contributing members and employees of the Department of Economic Development before October 31, 1995 who elected to continue membership) and, the Narragansett Bay Water Quality District Commission (members of a collective bargaining unit) are also covered and have the same benefits as State employees.

Plan vesting provisions – after five years of service.

Retirement eligibility and plan benefits – are summarized in the following table:

Schedule				Maximum
		Retirement Eligibility	Benefit accrual rates	benefit
(A)	Completed 10	Age 60 with 10 years of	Effective until June 30, 2012:	80% of final
	years of service	service or after 28 years	1.7% for each of first ten years	average
	on or before July	of service at any age	1.9% for each of next ten years	earnings (3
	1, 2005 and		3.0% for each of next fourteen years	consecutive
	eligible to retire		2% for the 35 th year	highest years)
	as of September			
	30, 2009		Effective July 1, 2012: 1.0% per year	
			through June 30, 2015.	
			Effective July 1, 2015, for members	
			with 20 years of service as of July 1,	
			2012: 2% per year	
(AB)	Completed 10	Minimum retirement age	Effective until June 30, 2012:	80% of final
	years of service	of 62 and ten years of	Same accrual rates as (A) above to	average
	on or before July,	service with a downward	September 30, 2009 and then Schedule	earnings (5
	1, 2005 but	adjustment of the	B rates (below) thereafter	consecutive
	ineligible to retire	minimum retirement age		highest years)
	as of September	based on the years of	Effective July 1, 2012: 1.0% per year	
	30, 2009	service credit as of September 30, 2009	through June 30, 2015.	
			Effective July 1, 2015, for members	
			with 20 years of service as of July 1,	
			2012: 2% per year	
(B)	Less than 10	Age 65 with 10 years of	Effective until June 30, 2012:	75% of final
	years of service	service or after 29 years	1.6% for each of first ten years	average
	before July 1,	of service and age 59	1.8% for each of next ten years	earnings (5
	2005 and eligible		2.0% for each of next five years	consecutive
	to retire as of		2.25% for each of next five years	highest years)
	September 30,		2.5% for each of next seven years	
	2009		2.25% for the 38 th year	
			Effective July 1, 2012: 1.0% per year	

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

(B1)	Less than 10 years of service before July 1, 2005 and ineligible to retire as of September 30, 2009	Age 65 with ten years of service, or age 62 with at least 29 years of service with a downward adjustment of the minimum retirement age based on the years of service credit as of September 30, 2009	Same as Schedule B	75% of final average earnings (5 consecutive highest years)
(B2)	Less than 5 years of service as of July 1, 2012	Social Security Retirement Age and 5 years of contributory service	1.6% for each of first ten years Effective July 1, 2012: 1.0% per year	75% of final average earnings (5 consecutive highest years)

Effective July 1, 2015 general employees with more than 20 years of service at July 1, 2012 increased their employee contribution rates to 11% and will participate solely in the defined benefit plan. Members will receive a benefit accrual of 2% per year based on the three or five-year average compensation.

Effective July 1, 2015 employees are eligible to retire upon the attainment of: age 65 with 30 years of service, 64 with 31 years of service, 63 with 32 years of service, or 62 with 33 years of service. Members may retire earlier if their RIRSA date is earlier or are eligible under a transition rule.

State correctional officers may retire at age 50 with 20 years of service. However, if not eligible to retire as of September 30, 2009, the minimum retirement age was modified to 55 with 25 years of service credit for correctional officers and registered nurses at the Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals.

The plan provides for survivor's benefits for service-connected death and certain lump sum death benefits.

Joint and survivor options are available to members. For members with 10 years of service as of July 1, 2005, the Service Retirement Allowance (SRA) Plus option provides for the payment of a larger benefit before the attainment of age sixty-two (62) and a reduced amount thereafter. The reduced amount is equal to the benefit before age sixty-two (62), including cost-of-living increases, minus the member's estimated social security benefit payable at age sixty-two (62).

Vested members that have 10 or more years of contributing service credit on June 30, 2012, may choose to retire at a retirement eligibility date that was calculated as of September 30, 2009, if the member continues to work and make retirement contributions until that date. If the member chooses this option, their retirement benefits will be calculated using the benefit that they have accrued as of June 30, 2012 - members will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.

State employees and public school teachers may retire with a reduced pension benefit if they have 20 years of service credit and they are within five years of their retirement date as prescribed in the Rhode Island Retirement Security Act (RIRSA). The actuarially reduced benefit will be calculated based on how close the member is to their RIRSA eligibility date.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of a plan exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5% (5-year return – 5.0%, with a max of 4%) and 50% calculated using the increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

The benefit adjustments are provided to all retirees entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect, and for all other retirees, the benefit adjustments shall commence upon the third anniversary of the date of retirement or the date on which the retiree reaches his or her Social Security retirement age, whichever is later. For members (and their beneficiaries) retiring after June 30, 2015, the annual benefit adjustment provided in any calendar year is equal to the lesser of either the member's retirement allowance or the first \$27,608 (indexed as of January 1, 2021) of retirement allowance multiplied by the percentage resulting from the COLA calculation as outlined in the preceding paragraph. The retirement amount subject to the COLA calculation is indexed annually in the same percentage as the COLA determination and is run annually regardless of the collective funding status.

For members and/or beneficiaries of members who retired on or before June 30, 2015 the current indexed amount of \$27,608 is replaced with \$33,130 (indexed as of January 1, 2021) until the funded ratio of the ERS, SPRBT and JRBT, calculated by the system's actuary on an aggregate basis, exceeds eighty percent (80%). At such time, the benefit adjustments will then be provided on the lower amount (currently indexed at \$27,608).

Disability retirement provisions - the plan also provides nonservice-connected disability benefits after five years of service and service-connected disability pensions with no minimum service requirement. Effective for applications filed after September 30, 2009, accidental disability will be available at 66 2/3% for members who are permanently and totally disabled as determined by the Retirement Board. If the disability is determined to be partial and the member is able to work in other jobs, the benefit will be limited to 50%. Disability benefits are subject to annual review by the Retirement Board.

Other plan provisions - Service credit purchases, excluding contribution refund paybacks and military service, requested after June 16, 2009 are calculated at full actuarial cost.

TEACHERS' SURVIVORS BENEFITS (TSB)

Plan members – the TSB covers all teachers in 24 school districts who do not participate in Social Security.

Plan vesting provisions – Survivors are eligible for benefits if the member has made contributions for at least six months prior to death or retirement.

Eligibility and plan benefits - the plan provides a survivor benefit to public school teachers in lieu of Social Security since not all school districts participate in the plan. The cost of the benefits provided by the plan are two percent (2%) of the member's annual salary up to but not exceeding an annual salary of \$11,500; one-half (1/2) of the cost is contributed by the member by deductions from his or her salary, and the other half (1/2) is contributed and paid by the respective school district by which the member is employed. These contributions are in addition to the contributions required for regular pension benefits.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Spouse, parents, family and children's benefits are payable following the death of a member. A spouse shall be entitled to benefits upon attaining the age of sixty (60) years. Children's benefits are payable to the child, including a stepchild or adopted child of a deceased member if the child is unmarried and under the age of eighteen (18) years or twenty-three (23) years and a full-time student, and was dependent upon the member at the time of the member's death. Family benefits are provided if at the time of the member's death the surviving spouse has in his or her care a child of the deceased member entitled to child benefits. Parents' benefits are payable to the parent or parents of a deceased member if the member did not leave a widow, widower, or child who could ever qualify for monthly benefits on the member's wages and the parent has reached the age of 60 years, has not remarried, and received support from the member. In January, a yearly cost-of-living adjustment for spouse's benefits is paid and based on the annual social security adjustment.

The TSB plan provides benefits based on the highest salary at the time of retirement of the teacher. Benefits are payable in accordance with the following table:

	Basic Monthly Spouse's
Highest Annual Salary	or Domestic Partner's Benefit
\$17,000 or less	\$ 825
\$17,001 to \$25,000	\$ 963
\$25,001 to \$33,000	\$ 1,100
\$33,001 to \$40,000	\$ 1,238
\$40,001 and over	\$ 1,375

Benefits payable to children and families are equal to the spousal benefit multiplied by the percentage below:

	Parent and 2	One	Two	Three or more	
Parent and	or more	Child	Children	Children	Dependent
1 Child	Children	Alone	Alone	Alone	Parent
150%	175%	75%	150%	175%	100%

Cost of Living Adjustments – current eligible members' beneficiaries of the TSB receive the same COLA granted to members of Social Security. There was a 1.3% increase as of January 1, 2021.

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM (MERS)

The MERS was established under the Rhode Island General Laws and placed under the management of the Retirement Board to provide retirement allowances to employees of municipalities, housing authorities, water and sewer districts, and municipal police and fire persons that have elected to participate.

Plan members – A summary of participating employers is listed below:

Municipalities, housing authorities, water and sewer districts	69
Municipal police and fire departments	_52
Total participating units as of the actuarial valuation	
at June 30, 2020	<u>121</u>

Plan vesting provisions - after five years of service.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Retirement eligibility and plan benefits – For general employees prior to June 30, 2012 the plan provided retirement benefits equal to 2% of a member's final average salary multiplied by the number of years of total service up to a maximum of 75%. Such benefits are available to members at least age 58 with 10 years of service or after 30 years of service at any age. Benefits accrued at June 30, 2012 are protected under the Rhode Island Retirement Security Act until it is exceeded by the member's full years of service credit, including service after June 30, 2012, multiplied by the average of five consecutive years of compensation. Effective July 1, 2012 the retirement age mirrors the Social Security Normal Retirement Age not to exceed age 67. Members will receive a benefit accrual of 1.0% per year based on the five-year average compensation.

Effective July 1, 2015 general employees with more than 20 years of service at July 1, 2012 will increase their employee contribution rates to 8.25% (9.25% for units with a cost of living adjustment provision) and will participate solely in the defined benefit plan. Members will receive a benefit accrual of 2% per year based on the three or five-year average compensation.

Effective July 1, 2015 general employees are eligible to retire upon the attainment of: age 65 with 30 years of service, 64 with 31 years of service, 63 with 32 years of service, or 62 with 33 years of service. Members may retire earlier if their RIRSA date is earlier or are eligible under a transition rule.

Joint and survivor options are available. For members with 10 years of service as of July 1, 2005, the Service Retirement Allowance (SRA) Plus option provides for the payment of a larger benefit before the attainment of age sixty-two (62) and a reduced amount thereafter. The reduced amount is equal to the benefit before age sixty-two (62), including cost-of-living increases, minus the member's estimated social security benefit payable at age sixty-two (62).

Prior to June 30, 2012, police and fire personnel may retire at age 55 if they have 10 years of service or after 25 years of service at any age. An option may be elected to provide a 20-year service pension with a benefit equal to 2.5% for each year of service up to a maximum of 75% for police and fire personnel. Benefits are based on the average of the highest three consecutive years' earnings, exclusive of overtime.

From June 30, 2012 to June 30, 2015, retirement age for police and fire personnel is 55 years old with 25 years of total service or for members with five years of service but less than 25 years of service the new retirement age will mirror the Social Security Normal Retirement Age not to exceed 67. Police officers or firefighters, that are at least 45 years old, have 10 or more years of contributing service and are eligible to retire prior to age 52 under the law in effect on June 30, 2012, may retire at age 52. Effective July 1, 2015, police and fire personnel may retire at age 50 with 25 years of service, or any age with 27 years of service. MERS police and fire personnel will contribute 9.00% (10.00% for units with a cost of living adjustment).

As of June 30, 2012, members will continue to have a frozen benefit accrual of 2.0% per year for a standard 25 year with any age and out plan; 2.5% for a standard 20 year with any age and out plan. Effective July 1, 2012 the optional 20 and 25 year with retirement at any age plans have been eliminated. The benefit accrual for all plans will be 2.0% per year based on the five-year average compensation, exclusive of overtime. Police and fire employees may retire with a reduced pension benefit if they have 20 years of service and are within five years of their retirement eligibility. The actuarially reduced benefit will be calculated based on how close the member is to the eligibility date that is prescribed in the Rhode Island Retirement Security Act.

The plan also provides survivor's benefits and certain lump sum death benefits.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Cost of Living Adjustments – An optional cost-of-living provision may be elected for police and fire personnel and general employees. The Cost of Living Adjustment (COLA) has been suspended for any unit whose funding level is less than 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the funding level of a plan exceeds 80% funded eligible retirees may receive a COLA annually effective on the date of their retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5% (5-year return -5.0%, with a max of 4%) and 50% calculated using the increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

The benefit adjustments are provided to all retirees entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect, and for all other retirees the benefit adjustments shall commence upon the third anniversary of the date of retirement or the date on which the retiree reaches his or her Social Security retirement age, whichever is later. For police and fire employees that retired under the provisions of § 45-21.2-5(b)(1)(A), the benefit adjustment provided shall commence on the later of the third anniversary of the date of retirement or the date on which the retiree reaches age fifty-five (55); or for police and fire employees retiring under the provisions of §45-21.2-5(b)(1)(B), the benefit adjustment shall commence on the later of the third anniversary of the date of retirement or the date on which the retiree reaches age fifty (50). For all present and former employees, active and retired members, and beneficiaries receiving any retirement, disability or death allowance or benefit of any kind, the annual benefit adjustment provided in any calendar year is equal to the lesser of either the member's retirement allowance or the first \$27,608 (indexed as of January 1, 2021) of retirement allowance, multiplied by the percentage resulting from the COLA calculation as outlined in the preceding paragraph. The retirement amount subject to the COLA calculation is indexed annually in the same percentage as the COLA determination and is run annually regardless of the collective funding status.

For members and/or beneficiaries of members who retired on or before June 30, 2015, the indexed amount of \$27,608 is replaced with \$33,130 (indexed as of January 1, 2021) until the municipal plan's funded ratio, calculated by the system's actuary, exceeds eighty percent (80%). At such time, the benefit adjustments will then be provided on the lower amount (currently indexed at \$27,608).

The actual COLA paid to retirees effective January 1, 2021 within MERS units that had achieved an 80% funding status was 1.06%. Retirees within 58 MERS units received the COLA.

Disability retirement provisions - The plan also provides nonservice-connected disability benefits after 5 years of service; service-connected disability pensions with no minimum service requirement.

STATE POLICE RETIREMENT BENEFITS TRUST (SPRBT)

The State Police Retirement Benefits Trust was established under Rhode Island General Law Section 42-28-22.1 and was placed under the management of the Retirement Board for the purpose of providing retirement allowances to State Police.

Plan members – the plan covers all State Police and Superintendents hired after July 1, 1987.

Retirement eligibility and plan benefits – Prior to June 30, 2012 the plan generally provides retirement benefits equal to 50% of final salary after 20 years of service, plus 3.0% of final salary times service in excess of 20 years through 25 years to a maximum of 65% of final salary. Such benefits are available to members after 20 years of service regardless of age. The Superintendent of the State Police will receive 50% of his/her final salary and may retire after attainment of age 60 and 10 years of service.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

The General Laws were amended such that any member of the state police, other than the superintendent, who is hired on or after July 1, 2007 and who has served for twenty-five (25) years shall be entitled to a retirement allowance of 50% of the final salary. In addition, any member may serve up to a maximum of 30 years, and shall be allowed an additional amount equal to 3.0% for each completed year served after 25 years to a maximum retirement allowance not to exceed 65% of the final salary.

Benefits are based on the final base salary earned at retirement including longevity increment, holiday pay, clothing allowance and up to 400 overtime hours.

Effective July 1, 2012 state police officers are eligible to retire once they have accrued a retirement benefit equal to 50% of their whole salary, with mandatory retirement once they have accrued a retirement benefit equal to 65% of their whole salary. State police officers will earn a 2% accrual rate for each year of contributing service. Benefits will be calculated on the average of the highest five consecutive years of salary, including up to 400 hours of mandatory overtime service. Benefits accrued as of June 30, 2012 will be protected under the Rhode Island Retirement Security Act.

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of a plan exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5% (5-year return – 5.0%, with a max of 4%) and 50% calculated using the increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

The benefit adjustments are provided to all retirees entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect, and for all other retirees, the benefit adjustments shall commence upon the third anniversary of the date of retirement or the date on which the retiree reaches his or her Social Security retirement age, whichever is later. For members (and their beneficiaries) retiring after June 30, 2015, the annual benefit adjustment provided in any calendar year is equal to the lesser of either the member's retirement allowance or the first \$27,608 (indexed as of January 1, 2021) of retirement allowance multiplied by the percentage resulting from the COLA calculation as outlined in the preceding paragraph. The retirement amount subject to the COLA calculation is indexed annually in the same percentage as the COLA determination and is run annually regardless of the collective funding status.

For members and/or beneficiaries of members who retired on or before June 30, 2015 the current indexed amount of \$27,608 is replaced with \$33,130 (indexed as of January 1, 2021) until the funded ratio of the ERS, SPRBT and JRBT, calculated by the system's actuary on an aggregate basis, exceeds eighty percent (80%). At such time, the benefit adjustments will then be provided on the lower amount (currently indexed at \$27,608).

Disability retirement provisions - the plan provides nonservice-connected disability benefits after 10 years of service and service-connected disability pensions with no minimum service requirement.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

JUDICIAL RETIREMENT BENEFITS TRUST (JRBT)

The Judicial Retirement Benefits Trust was established under Rhode Island General Laws 8-8.2-7; 8-3-16; 8-8-10.1; 28-30-18.1; and was placed under the management of the Retirement Board for the purpose of providing retirement allowances to Justices of the Traffic Tribunal, Supreme, Superior, Family, District and Workers Compensation courts.

Plan members – the plan covers all Judges appointed after December 31, 1989.

Retirement eligibility and plan benefits – are summarized in the following table:

Judges appointed	Retirement benefit
After: December 31, 1989 but before July 2, 1997	75% of the final salary at the time of retirement after 20 years of service, or 10 years of service and attainment of age 65. Judges retiring after 20 years of service after age 65 or 15 years of service after age 70 receive full retirement benefits, which is the final salary at time of retirement.
After:	
July 2, 1997 but before January 1, 2009	Same as above except, salary is the average highest three (3) consecutive years of compensation rather than final salary.
After: January 1, 2009 but	Judges with 20 years of service after age 65 or judges with 15 years of service after age 70 will receive 90% of the average of the highest three consecutive years of compensation. Judges appointed on or after January 1, 2009 with 10 years of service and age 65 or 20 years of service at any age are entitled to a reduced benefit of 70% of the average highest three
before July 1, 2009	consecutive years of compensation.
July 1, 2007	Judges designating a survivor benefit with 20 years of service and age 65 or 15 years of service and age 70 receive a reduced benefit equal to 80% of the average highest three consecutive years of compensation. Judges designating a survivor benefit with 10 years of service after age 65 or 20 years of service at any age receive a reduced benefit equal to 60% of the average highest three consecutive years of compensation.
After: July 1, 2009	Judges with 20 years of service after age 65 or with 15 years of service after age 70 will receive 80% of the average of the highest five consecutive years of compensation. Judges with 10 years of service and age 65 or 20 years of service at any age are entitled to a reduced benefit of 65% of the average highest five consecutive years of compensation.
	Judges designating a survivor benefit with 20 years of service and age 65 or 15 years of service and age 70 receive a reduced benefit equal to 70% of average highest five consecutive years of compensation. Judges designating a survivor benefit with 10 years of service after age 65 or 20 years of service at any age receive a reduced benefit equal to 55% of average highest five consecutive years of compensation.

Certain survivor benefits are also provided to judges who are plan members, which is 50% of the benefit amount payable to the judicial member.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of a plan exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5% (5-year return – 5.0%, with a max of 4%) and 50% calculated using the increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

The benefit adjustments are provided to all retirees entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect, and for all other retirees, the benefit adjustments shall commence upon the third anniversary of the date of retirement or the date on which the retiree reaches his or her Social Security retirement age, whichever is later. For members (and their beneficiaries) retiring after June 30, 2015, the annual benefit adjustment provided in any calendar year is equal to the lesser of either the member's retirement allowance or the first \$27,608 (indexed as of January 1, 2021) of retirement allowance multiplied by the percentage resulting from the COLA calculation as outlined in the preceding paragraph. The retirement amount subject to the COLA calculation is indexed annually in the same percentage as the COLA determination and is run annually regardless of the collective funding status.

For members and/or beneficiaries of members who retired on or before June 30, 2015 the current indexed amount of \$27,608 is replaced with \$33,130 (indexed as of January 1, 2021) until the funded ratio of the ERS, SPRBT and JRBT, calculated by the system's actuary on an aggregate basis, exceeds eighty percent (80%). At such time, the benefit adjustments will then be provided on the lower amount (currently indexed at \$27,608).

STATE OF RHODE ISLAND JUDICIAL RETIREMENT FUND TRUST (RIJRFT)

Effective July 1, 2012 and pursuant to Rhode Island General Law section 8-3-16, the retirement board established a trust to collect proceeds for the purpose of paying retirement benefits to participating judges or their beneficiaries.

Plan members – the plan covers seven (7) judges appointed prior to January 1, 1990. These members are active judges (as of June 30, 2012) appointed prior to January 1, 1990 that do not participate in the Judicial Retirement Benefit Trust. Prior to creating the trust, benefits for these members were intended to be funded on a pay-as-you-go basis. To the extent assets in the trust are insufficient to fund member benefits, the State would also fund retirement benefits on a pay-as-you-go basis as it does for sixty-five (65) retired judges and surviving beneficiaries that were not members of either judicial plan. The employee contribution rate is 12% of salary (except for members of the Supreme Court who contribute 8.75%).

Retirement eligibility and plan benefits – The plan provides retirement benefits for members who have served for 20 years and have reached the age of 65 years, or has served 15 years, and reached the age of 70 years and may retire from regular service and receive a benefit equal to the annual salary the justice was receiving at the time of their retirement. Members who served as a justice for 20 years or have served for 10 years and reached age 65 years may retire from regular service and receive a benefit equal to 75% of the annual salary at the time of retirement.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of a plan exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5% (5-year return – 5.0%, with a max of 4%) and 50% calculated using the increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

The benefit adjustments are provided to all retirees entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect, and for all other retirees, the benefit adjustments shall commence upon the third anniversary of the date of retirement or the date on which the retiree reaches his or her Social Security retirement age, whichever is later. For members (and their beneficiaries) retiring after June 30, 2015, the annual benefit adjustment provided in any calendar year is equal to the lesser of either the member's retirement allowance or the first \$27,608 (indexed as of January 1, 2021) of retirement allowance multiplied by the percentage resulting from the COLA calculation as outlined in the preceding paragraph. The retirement amount subject to the COLA calculation is indexed annually in the same percentage as the COLA determination and is run annually regardless of the collective funding status.

For members and/or beneficiaries of members who retired on or before June 30, 2015 the current indexed amount of \$27,608 is replaced with \$33,130 (indexed as of January 1, 2021) until the funded ratio of the ERS, SPRBT and JRBT, calculated by the system's actuary on an aggregate basis, exceeds eighty percent (80%). At such time, the benefit adjustments will then be provided on the lower amount (currently indexed at \$27,608).

STATE OF RHODE ISLAND STATE POLICE RETIREMENT FUND TRUST (SPRFT)

Effective June 8, 2016 and pursuant to Rhode Island General Law section 42-28-22.1, the retirement board established a trust to collect proceeds for the purpose of paying retirement benefits to participating members of the state police initially hired on or before July 1, 1987, or their beneficiaries.

The trust was established to reduce the amount of the unfunded liability attributable to the retirement benefits for members of the state police hired on or before July 1, 1987. The trust was funded with monies obtained from the Department of Justice's Equitable Sharing Program, resulting from a settlement in which \$45 million of such settlement was allocated for use by the state police. Pursuant to Rhode Island General Law section 42-28-22.2, the State shall deposit contributions for the members of the state police initially hired on or before July 1, 1987 to be held in trust. The trust was established with a \$15 million supplemental contribution (from funds available to the State from the Department of Justice's Equitable Sharing Program) that was deposited in fiscal 2017. Taking into account the initial supplemental contribution, as certified by the State's actuary, the unfunded actuarial liability will be amortized over an 18 year period. The State will make annual contributions into the trust for this funding period, or until the unfunded accrued liability is fully amortized. This trust is a closed plan because there are no longer any active members.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Plan members – the plan covers members of the state police hired on or before July 1, 1987. Prior to creating the trust, benefits for these members were intended to be funded on a pay-as-you-go basis.

Retirement eligibility and plan benefits – The plan generally provides retirement benefits equal to 50% of final salary after 20 years of service, members that retired after July 1, 1972 could earn an additional 3.0% of final salary times service in excess of 20 years through 25 years to a maximum of 65% of final salary. Such benefits are available to members after 20 years of service regardless of age.

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of a plan exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5% (5-year return – 5.0%, with a max of 4%) and 50% calculated using the increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

The benefit adjustments are provided to all retirees entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect, and for all other retirees, the benefit adjustments shall commence upon the third anniversary of the date of retirement or the date on which the retiree reaches his or her Social Security retirement age, whichever is later. For members (and their beneficiaries) retiring after June 30, 2015, the annual benefit adjustment provided in any calendar year is equal to the lesser of either the member's retirement allowance or the first \$27,608 (indexed as of January 1, 2021) of retirement allowance multiplied by the percentage resulting from the COLA calculation as outlined in the preceding paragraph. The retirement amount subject to the COLA calculation is indexed annually in the same percentage as the COLA determination and is run annually regardless of the collective funding status.

For members and/or beneficiaries of members who retired on or before June 30, 2015 the current indexed amount of \$27,608 is replaced with \$33,130 (indexed as of January 1, 2021) until the funded ratio of the ERS, SPRBT and JRBT, calculated by the system's actuary on an aggregate basis, exceeds eighty percent (80%). At such time, the benefit adjustments will then be provided on the lower amount (currently indexed at \$27,608).

DEFINED CONTRIBUTION PLAN

The State of Rhode Island Defined Contribution Retirement Plan (the "Plan") is a defined contribution (money purchase) plan that operates under Section 401(a) of the Internal Revenue Code. The Plan was established under Rhode Island General Law section 36-10.3-2 and was placed under the management of the Retirement Board. The Retirement Board is the Plan administrator and Plan trustee. The law authorizes the State Investment Commission to select the appropriate third-party administrator for the Plan and to adopt Plan, trust, and/or custodial documents subject to certain guidelines outlined in the statute. The State Investment Commission is responsible for implementing the investment policy of the Plan and selecting the investment options available to members. TIAA-CREF serves as record keeper for the Plan and Plan assets are held by J.P. Morgan as investment custodian.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

2. Plan Membership and Benefit Provisions (continued)

Plan members – The plan covers members of the defined benefit plan within the Employees' Retirement System of Rhode Island with less than 20 years of service as of June 30, 2012, excluding legislators, correction officers, judges, state police, and MERS general police and fire employees who participate in Social Security. For covered employees, participation in the defined contribution plan is mandatory.

Plan vesting provisions – The total amount contributed by the member, including associated investment gains and losses, shall immediately vest in the member's account and is non-forfeitable. The total amount contributed by the employer, including associated investment gains and losses, vests with the member and is non-forfeitable upon completion of three (3) years of contributory service. Service credit under ERS or MERS prior to July 1, 2012 is credited to the member for vesting purposes.

Member accounts – Each member's account is credited with the member and employer's contribution and an allocation of the plan's earnings. Allocations are based on a relationship of the member's account balance in each investment fund to the total of all account balances in that fund. The retirement benefit to which a member is entitled is the benefit that can be provided from the member's account.

Forfeitures – Non-vested employer contributions are forfeited upon termination of employment. Such forfeitures can be used by employers to offset future remittances to the plan.

Contributions – The plan's benefits are funded by contributions from the participants and the employer, as specified in Rhode Island General Law 36-10.3-4 and 36-10.3-5.

Eligible state employees and teachers and MERS general employees that participate in Social Security contribute 5% of the member's compensation. Teachers and MERS general employees not covered by Social Security must contribute 7% of their compensation.

Employers contribute to these member's individual accounts an amount equal to 1% to 1.5% of the member's compensation depending upon years of service for those participating in Social Security. For eligible members who do not participate in Social Security, the employers contribute an amount equal to 3.0% to 3.5% depending upon years of service.

Investment options – Member and employer contributions may be invested in a variety of investment options broadly diversified with distinct risk and return characteristics. The investment options provide opportunities to diversify across the risk-return spectrum with a range of investment choices within varied asset classes.

The investment programs are managed by TIAA-CREF and have various investment strategies.

Retirement benefits — Benefits may be paid to a member after severance from employment, death, Plan termination, or upon a deemed severance from employment for participants performing qualified military service. At a minimum, retirement benefits must begin no later than April 1 of the calendar year following the year in which you attain age 70 ½ or terminate employment, if later. Members have the option to receive benefit payments in the form of a Single Life Annuity, Two Life Annuity, Lump Sum Benefit, or Installments. These payments are subject to any restrictions in the investment vehicles.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

3. Summary of Significant Accounting Policies

These financial statements were prepared in accordance with accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB). The Governmental Accounting Standards Board (GASB) is responsible for establishing generally accepted accounting principles for defined benefit and defined contribution plans established and administered by governmental entities.

Basis of Accounting - The financial statements of the System are prepared on the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded when incurred.

Cash and Cash Equivalents - Cash represents cash held in trust in a financial institution. Cash equivalents are highly liquid investments with a maturity of three months or less at the time of purchase.

Investments - Investment transactions are recorded on a trade date basis. Gains or losses on foreign currency exchange contracts are included in income consistent with changes in the underlying exchange rates. Dividend income is recorded on the ex-dividend date.

Method Used to Value Investments - Investments are recorded in the financial statements at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Short-term investments are generally carried at cost or amortized cost, which approximates fair value.

The fair value of fixed income securities and domestic and international equity securities is generally based on published market prices and quotations from national security exchanges and securities pricing services.

Commingled funds and collective unit trusts include institutional international equity index funds and an emerging markets debt fund. The fair value of these funds is based on the reported net asset value (NAV) based upon the fair value of the underlying securities or assets held in the fund.

Derivative investments (e.g., futures contracts and credit default swaps) are valued at the settlement price established each day by the board of trade or exchange on which they are traded.

The System also trades in foreign exchange contracts to manage exposure to foreign currency risks. Such contracts are used to purchase and sell foreign currency at a guaranteed future price. The change in the estimated fair value of these contracts, which reflects current foreign exchange rates, is included in the determination of the fair value of the System's investments.

Other investments that are not traded on a national security exchange (primarily private equity, real estate, hedge funds, infrastructure investments, Crisis Protection Class – Trend Following, and emerging markets debt) are valued based on the reported Net Asset Value (NAV) by the fund manager or general partner. Publicly traded investments held by the funds or partnerships are valued based on quoted market prices. If not publicly traded, the fair value is determined by the general partner following U.S. generally accepted accounting principles. Financial Accounting Standards Board ASC Topic 820, Fair Value Measurements and Disclosures, requires the limited partnership general partners for these investment types to value non-publicly traded assets at current fair value, taking into consideration the financial performance of the issuer, cash flow analysis, recent sales prices, market comparable transactions, a new round of financing, a change in economic conditions, and other pertinent information.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

3. Summary of Significant Accounting Policies (continued)

Hedge funds, private equity, real estate, infrastructure, crisis protection class – trend following investments, and emerging markets debt represented 6.2%, 14.4%, 5.2%, 2.4%, 4.6% and 1.8% respectively of the total reported fair value of ERSRI's pooled investment trust at June 30, 2021.

Investment expenses – Investment expenses include investment consultant fees, custodial fees, direct investment expenses paid to managers, and certain indirect expenses allocated by managers to fund or partnership investors. Certain Office of the General Treasurer expenses associated with oversight of the pooled investment trust are also allocated and included as investment expenses. When indirect investment expenses for certain types of investments (e.g., hedge funds, private equity, real estate, infrastructure, emerging markets debt, and crisis protection class), are not reported separately to System management and the investment custodian, additional information is obtained to allow reporting of the System's share of such indirect investment expenses on a gross fee basis.

Net investment income within the defined contribution plan is reported on a net-of-fees basis.

Contributions - Plan member contributions for the defined benefit plans are recognized in the period in which the wages, subject to required contributions, are earned for the performance of duties for covered employment. Employer contributions to each defined benefit plan are recognized when due and the employer has made a formal commitment to provide the contributions.

Plan member and employer contributions for the defined contribution plan are contributed to the member's individual account in the plan as a defined percentage of the member's compensation paid during the plan year ending June 30.

Benefits - Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

Prepaid Assets – These assets represent the amounts paid to a vendor pursuant to a contract to design, transition, and implement new line-of-business, general ledger accounting system, and payroll administration systems. Under the new system development and operations contract, the vendor will supply and operate the system for the contract period. Consequently, no capital asset related to the new system are recognized or depreciated. The amounts paid before the system became operational have been accounted for as prepaid assets items in prior years. Beginning in fiscal year 2017, when system operations fully commenced, that prepaid amount is amortized ratably over the remaining contract period.

Total Columns - Total columns on the financial statements are presented only to facilitate financial analysis. Data in these columns are not comparable to a consolidation. Inter-fund eliminations have not been made in the aggregation of this data.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingencies. These estimates are subject to a certain amount of uncertainty in the near term, which could result in changes in the values reported for those assets in the statements of fiduciary net position. Because of the inherent uncertainty in the valuation of privately held securities, the fair value may differ from the values that would have been used if a ready market for such securities existed, and the difference can be material. Estimates also affect the reported amounts of income/additions and expenses/deductions during the reporting period. Actual results could differ from these estimates.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

4. Cash Deposits and Cash Equivalents

At June 30, 2021, the carrying amounts of the plans' cash deposits are listed below:

Cash Deposits	<u>I</u>	ERS/TSB	MERS	SPRBT	JRBT]	RIJRFT	S	PRFT	Total
Book Balance	\$	6,182,790	\$ 1,087,090	\$ 1,464,107	\$ 164,787	\$	555,154	\$	72,980	\$ 9,526,908
Bank Balance	\$	6,510,954	\$ 1,183,797	\$ 1,464,107	\$ 164,787	\$	555,154	\$	77,498	\$ 9,956,297

The bank and book balances represent the plans' deposits in short-term trust accounts, which include demand deposit accounts and interest-bearing, collateralized bank deposit accounts. The bank balances, include interest-bearing collateralized bank deposits and are either federally insured or collateralized (102%) with U.S. Treasury, agencies, and federal home loan bank letters of credit held by a third-party custodian.

In accordance with Rhode Island General Law Chapter 35-10.1, depository institutions holding deposits of the State, its agencies or governmental subdivisions of the State shall, at a minimum, insure or pledge eligible collateral equal to one hundred percent of time deposits with maturities greater than sixty days. Any of these institutions that do not meet minimum capital standards prescribed by federal regulators shall insure or pledge eligible collateral equal to one hundred percent of deposits, regardless of maturity. None of the System's deposits were required to be collateralized at June 30, 2021 (excluding the collateralized interest-bearing deposits). However, the State Investment Commission has adopted a collateralization requirement for institutions holding the State's deposits. Financial institutions are required to pledge collateral equal to 102% of the deposit amounts that are not insured by federal depository insurance. Unless FHLB letters of credit are used as collateral, in which case those are required at 100%.

The General Treasurer makes certain short-term investments on a daily basis. Rhode Island General Law Section 35-10-11 (b)(3) requires that all investments shall be made in securities as would be acquired by prudent persons of discretion and intelligence who are seeking a reasonable income and the preservation of capital.

5. Investments – Pooled Investment Trust

(a). General

The custodian bank holds assets of the System in a Pooled Investment Trust and each plan holds units in the trust. The number of units held by each plan is a function of each plans' respective contributions to, or withdrawals from, the trust.

Investment policy - The State Investment Commission (SIC) oversees all investments made by the State of Rhode Island, including those made for the System's Pooled Investment Trust. The establishment of the SIC, its legal authority and investment powers are outlined in Chapter 35-10 of the Rhode Island General Laws.

The SIC has adopted a Defined Benefit Investment Policy Statement which includes specific asset allocation targets and asset class policies. The most recent policy statement was adopted by the SIC on June 27, 2018 and updated on January 22, 2020 and may be amended by a majority vote of SIC members. The SIC's asset allocation policy seeks to achieve the assumed rate of return adopted by the System over the long-term while reducing risk through the prudent diversification of the portfolio across various asset classes.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

The System leverages the services of actuaries and consultants to provide guidance regarding actuarial matters, asset allocation, and investment policy development. The SIC manages the investment program pursuant to the investment policy, develops asset class guidelines, monitors and evaluates performance, and makes determinations regarding the retention of managers. Professional investment managers are selected by the SIC to manage portfolios in accordance with investment management agreements.

The following was the SIC's adopted asset allocation policy targets as of June 30, 2021:

Asset Class	Long-Term Target Asset Allocation
GROWTH	
Global Equity	40.0%
Private Growth	15.0%
subtotal	55.0%
INCOME	12.0%
STABILITY	
Crisis Protection Class	10.0%
Inflation Protection	8.0%
Volatility Protection	15.0%
subtotal	33.0%
Total	100.0%

Consistent with a target asset allocation model adopted by the State Investment Commission (SIC), the System directs its separate-account investment managers to maintain, within the mandate specified by the SIC, diversified portfolios by sector, credit rating and issuer using the prudent person standard, which is the standard of care employed solely in the interest of the participants and beneficiaries of the funds and for the exclusive purpose of providing benefits to participants and defraying reasonable expenses of administering the funds.

Specific manager performance objectives are outlined and generally stated in relation to a benchmark or relevant index. These guidelines also include prohibited investments, limitations on maximum exposure to a single industry or single issuer, a minimum number of holdings within the manager's portfolio and, for fixed income managers, minimum credit quality ratings and duration/maturity targets.

Investment expense is allocated to each plan based on the plan's units in the Pooled Investment Trust at the end of each month.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

The following table presents the fair value of investments by type that are held within the Pooled Investment Trust for the defined benefit plans at June 30, 2021:

	June 30, 2021			
Investment Type	Fair Value			
Cash and Cash Equivalents:				
US Cash	\$ 49,412,296			
Non-US Cash	4,110,868			
Commercial Paper	4,248,566			
Repurchase Agreements	77,700,000			
Short-Term Collective Investment Funds	258,270,835			
US Government Securities	745,746,607			
US Government Agency Securities	163,097,106			
Collateralized Mortgage Obligations	45,390,927			
Corporate Bonds	699,596,465			
Term Loans	194,008,076			
Emerging Markets Debt - Collective Unit Trust	186,847,642			
Commingled Funds - International Equity	1,299,793,131			
Domestic Equity Securities	2,658,681,988			
International Equity Securities	482,307,013			
Equity Options - Private LLC Investment	259,245,074			
Private Equity	1,509,545,543			
Real Estate	545,387,761			
Hedge Funds	653,375,580			
Crisis Protection Class - Trend Following - Limited partnerships	485,477,965			
Infrastructure	256,703,735			
Derivatives:				
Futures	2,532,332			
Credit Default Swaps	4,294,704			
Investments at Fair Value	10,585,774,214			
Investment receivable	366,363,873			
Investment payable	(446,725,786)			
Total Pooled Investment Trust	\$ 10,505,412,301			

(b) Fair value hierarchy

The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels:

Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date.

Level 2 inputs are other than quoted prices included within Level 1—that are observable for an asset or liability, either directly or indirectly.

Level 3 includes unobservable inputs for an asset or liability.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. If the fair value of an asset or a liability is measured using inputs from more than one level of the fair value hierarchy, the measurement is considered to be based on the lowest priority level input that is significant to the entire measurement.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

Investments and Derivative Instruments Measured at Fair Value

Investments at Fair Value	J	Fair Value une 30, 2021	in A	ouoted Prices Active Market for Identical Assets (level 1)	_	nificant Other ervable Inputs (level 2)	Significant nobservable Inputs (level 3)
Equity Investments							
Global Equity	\$	3,140,989,001	\$	3,140,989,001	\$		\$ -
Fixed Income							
US Government Securities		745,746,607		733,793,234		11,953,373	-
US Government Agency Securities		163,097,106		-		163,097,106	-
Corporate Bonds		699,596,465		-		699,596,465	-
Collateralized Mortgage Obligations		45,390,927		-		45,390,927	-
Term loans		194,008,076		<u> </u>		 _	 194,008,076
		1,847,839,181		733,793,234		920,037,871	 194,008,076
Derivative Investments							
Equity and Fixed Income Index Futures		2,532,332		2,532,332		_	-
Other Derivatives		4,294,704		-		4,294,704	_
		6,827,036		2,532,332		4,294,704	
C :ID		1249.566				1 2 10 5 6 6	
Commercial Paper		4,248,566		-		4,248,566	
Total Investment at Fair Value Level	\$	4,999,903,784	\$	3,877,314,567	\$	928,581,141	\$ 194,008,076
Investments Measured at Net Asset Value (NA	. <u>V)</u>						
Short-Term Collective Investment Funds	\$	258,270,835					
Commingled Funds - International Equity		1,299,793,131					
Hedge Funds		653,375,580					
Private Equity		1,509,545,543					
Real Estate		545,387,761					
Infrastructure		256,703,735					
Emerging Markets Debt Collective Unit Trust		186,847,642					
Equity Options - Private LLC Investment		259,245,074 485,477,965					
Crisis Protection Class - Trend Following		5,454,647,266					
		3,434,047,200					
Cash and Cash Equivalents							
US Cash		49,412,296					
Non US Cash		4,110,868					
Repurchase Agreements		77,700,000					
		131,223,164					
Net Investment Receivable		(80,361,913)					
Total Pooled Investment Trust	\$	10,505,412,301					

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

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 matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Term loans classified in Level 3 are valued using consensus pricing.

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.

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

	Fair Value	C	Unfunded ommitments	Redemption (if currently eligible)	Redemption Notice Period
			ommunients		renou
Short Term Collective Investment Funds (1)	\$ 258,270,835		-	daily	none
Commingled Funds - International Equity (2)	1,299,793,131		-	daily	see note below
Hedge Funds (3)	653,375,580		-	see note below	see note below
Private Equity (4)	1,509,545,543	\$	1,185,832,956	see note below	see note below
Real Estate (5)	545,387,761		151,648,923	see note below	see note below
Infrastructure Investments (6)	256,703,735		280,290,638	see note below	see note below
Crisis Protection Class - Trend Following (7)	485,477,965		-	see note below	see note below
Emerging Markets Debt - Collective Unit Trust (8)	186,847,642		-	see note below	see note below
Equity Options - Private LLC Investment (9)	259,245,074		-	see note below	see note below
	\$ 5,454,647,266	\$	1,617,772,517		

- (1) Short-Term Collective Investment Funds these investments are used as temporary cash management investments for amounts pending investment or for amounts liquidated from investments pending distribution for pension benefits. The fair value of these investments reflect the net asset value reported by the fund administrator which is a stable \$1 per unit. The underlying investments, which are short-term cash equivalent type investments, are generally carried at amortized cost which approximates fair value. There are no withdrawal limitations for the Short-Term Collective Investment Funds.
- (2) *Commingled funds* consist of three international equity index funds which are intended to replicate the performance of a specific index; e.g., MSCI EAFE. The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the commingled fund manager which reflects the exchange pricing of the equity holdings within each fund. The international equity commingled funds may be redeemed daily.
- (3) *Hedge funds* this portfolio is comprised of 9 limited partnerships divided into two sub-categories: global equity and absolute return. Global equity funds are designed to benefit from the stock market with considerably less risk. They own stakes in companies they expect to outperform and also sell short stocks that they expect to underperform. Absolute return hedge funds employ strategies that seek to generate long-term returns and mitigate risk, regardless of broader market moves. The funds invest across asset classes, including government bonds, other fixed income securities, equity indexes, commodities, and currencies.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2021. Of the underlying holdings within the hedge funds approximately 64% were valued based on Tier 1 inputs (unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted investments).

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

The system's investments in hedge fund assets are available for redemption on a monthly, quarterly, semi-annual or annual basis, and are subject to notice periods which vary by fund and range from 30 days to 75 days. Some funds limit redemptions to 25% of invested capital on any one redemption date.

(4) **Private equity** – these 116 limited partnership funds provide the portfolio exposure to private companies through equity and/or debt investments. Private equity fund managers invest in private companies with the goal of enhancing their value over the long-term.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2021.

Private equity – the investments cannot be redeemed. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

(5) *Real Estate* – these 17 limited partnership investments are comprised of two different private real estate equity components, Core and Non-Core, which generally refer to the relative levels of risk in the underlying assets. Core investments include existing, substantially leased, income-producing properties located principally in economically diversified metropolitan areas. Non-Core investments represent those properties and/or investment strategies that require specialized acquisition and management expertise and skill to mitigate the business and leasing risks that may be associated with individual investments. Non-Core investments, which may be referred to as Value Added and Opportunistic investments, are expected to be held for shorter periods, have greater volatility compared to Core investments, and as such, are expected to provide yields higher than those associated with Core investments.

These funds acquire, manage and sell physical properties, including office, retail, apartment, and industrial buildings as well as more niche property types, such as student housing, self-storage and hotels. The primary goals of this asset class are to provide current income, risk-adjusted total returns, and diversification.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2021.

With the exception of four core open-end funds which allow for quarterly redemptions, the investments cannot be redeemed. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

(6) *Infrastructure* – These nine funds provide inflation-protection and current income to the portfolio through investments in facilities and services required for an economy to function including electricity production and distribution, pipelines, sewers and waste management, airports, roads, bridges, ports, railroads, telephone and cable networks, and hospitals. The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2021.

With the exception of one open-end core fund which allows for quarterly liquidity, the investments cannot be redeemed. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

(5) Investments – Pooled Investment Trust (continued)

- (7) *Crisis Protection Class Trend Following* These three funds were created as limited liability companies with the Employees' Retirement System of the State of Rhode Island as the sole member. The investment managers' principal investment objectives for the companies include:
 - providing diversified exposure to market trends across asset classes, geographies and time horizons to generate sizable profits during the periods when growth-risk exposed assets decline significantly;
 - generating significant medium-term capital growth independent of overall movements in traditional stock and bond markets within a rigorous risk management framework; and
 - outperforming the Credit Suisse Liquid Alternative Beta Managed Futures Index (CLABT18 Index) over a 5-year period.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2021. As the Employees' Retirement System of the State of Rhode Island is the sole member, the limited liability company could be liquidated at its option. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

(8) *Emerging Markets Debt – Collective Unit Trust* – This collective unit trust seeks to generate attractive returns relative to an emerging markets debt blended benchmark. The strategy seeks to take advantage of investment opportunities across emerging markets fixed income spectrum, including hard and local currency denominated sovereign, quasi sovereign and corporate debt, and their derivatives. Currencies are used both to manage risk and enhance return.

The fair value of the collective unit trust has been determined using the NAV per share of the investments as reported by the manager of the collective trust at June 30, 2021.

This investment includes monthly liquidity provisions (first business day of the month) with notice required by the 22nd of the prior month.

(9) *Equity Options – Private LLC Investment* – The fund seeks to achieve its goal primarily through a strategy of writing exchange-traded put options on the S&P 500® Index. These options are fully collateralized by short duration U.S. Treasury securities. The advisor attempts to generate returns through the receipt of option premiums from selling puts, as well as through investments in short duration fixed income instruments, which collectively are intended to reduce volatility relative to what it would be if the fund held the underlying equity index on which the options are written.

The fair value of the equity options – private LLC investment has been determined using the NAV per share of the investments as reported by the general partner at June 30, 2021. The underlying investments at June 30, 2021, which consist of equity options and fixed income investments were publicly traded.

This investment includes monthly liquidity provisions with 7 business days' notice.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

(c) Rate of Return

For the year ended June 30, 2021, the annual money-weighted returns on investments within each of the plans, net of investment expense, are shown in the following table. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

	ERS	TSB	MERS	SPRBT	JRBT	RIJRFT	SPRFT
Money-weighted rate of return – year ended June 30, 2021	27.67%	27.21%	27.56%	27.08%	27.15%	15.33%	29.73%

(d) Interest Rate Risk

Interest rate risk is the possibility that the value of a fixed income security will decline due to changes in market interest rates. Due to its significant holdings of fixed income securities, the System manages its investment exposure to interest rate risk by comparing its fixed income and cash managers' portfoliolevel and security-level interest rate sensitivities against a predetermined benchmark index based on that manager's mandate. In general, the System uses duration (in years) to measure interest rate sensitivity. However, for its Liquid Credit managers, the System uses effective duration, which takes into effect the embedded optionality, to measure the sensitivity of its investments to changes in interest rates. In some cases, the System also sets absolute restrictions with respect to effective duration or maturity for individual securities or portfolios for manager portfolios. The interest rate risk policies currently utilized by the System vary by asset class which include Investment Grade Fixed Income, Liquid Credit, Long Duration Treasuries, Inflation-Linked Bonds, CPC Enhanced Cash Portfolio, and Strategic Cash.

The fixed income indices currently used by the System are:

- Barclays US Treasury Inflation Notes 1-10 Year Index
- Liquid Credit Custom BM: 50% BofA US High Yield Index + 50% Credit Suisse Leveraged Loan Index
- Long Duration BM: Barclays Long Duration US Treasury Index
- ICE BofA ML US Treasury Notes 0-1 Year
- Emerging Market Debt Custom BM: 50% JPM EMBI Global Diversified Index + 50% JPM GBI-EM Global Diversified Index
- Bloomberg Barclays US Corporate Bond Index
- Bloomberg Barclays Securitized MBS/ABS/CMBS Index

At June 30, 2021, no fixed income manager was outside of their policy guidelines.

The following table shows the System's fixed income investments by type, fair value and the effective duration at June 30, 2021:

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

Investment Type:	Fair Value	Effective Duration
US Government Agency Securities	\$ 163,097,106	3.79
US Government Securities	745,746,607	10.30
Collateralized Mortgage Obligations	45,390,927	3.46
Corporate Bonds	699,596,465	5.23
Term Loans	194,008,076	1.38
Emerging Market Debt	186,847,642	6.38
Total Fixed Income	\$ 2,034,686,823	6.67

The System had investments at June 30, 2021 totaling \$258 million in short-term collective investment funds. The cash-equivalent type investments held in those funds had a weighted average maturity of 69 days at June 30, 2021. The fund, by policy, holds only high-grade, highly liquid cash equivalent-type investments.

Repurchase agreements are secured with collateral held at a custodian bank. The System enters into repurchase agreements to earn interest on short-term funds. The System's repurchase agreements outstanding at June 30, 2021 had maturities of one to two days.

The System's investment in commercial paper totaling \$4,248,566 at June 30, 2021 had maturities ranging from 34 to 76 days.

The System invests in various mortgage-backed securities, such as collateralized mortgage obligations (CMO), interest-only and principal-only strips. They are reported in U.S. Government Agency Securities and Collateralized Mortgage Obligations in the table above. CMO's are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes or tranches in accordance with the CMO's established payment order. Some CMO tranches have more stable cash flows relative to changes in interest rates while others are significantly sensitive to interest rate fluctuations.

The System may invest in interest-only and principal-only strips in part to hedge against a rise in interest rates. Interest-only strips are based on cash flows from interest payments on underlying mortgages. Therefore, they are sensitive to pre-payments by mortgagees, which may result from a decline in interest rates. Principal-only strips receive principal cash flows from the underlying mortgages. In periods of rising interest rates, homeowners tend to make fewer mortgage prepayments.

(e) Credit Risk

Credit risk is the possibility of a loss due to the failure of a counterparty to repay a loan or meet another contractual obligation. The System may be exposed to credit risk with respect to its fixed income investments. The System manages its credit risk by setting credit rating criteria to govern the investment activities of its fixed income managers at the portfolio and security level. Ratings criteria may be expressed on a relative basis against predetermined benchmark index or on an absolute basis based on that manager's mandate. If a security is not rated by any Rating Agency, the internal rating assigned by the investment manager or an affiliate (Internal Rating) will be used. The credit risk policies currently utilized by the System vary by asset class and reflect the manager's strategy and the System's overall asset allocation targets and related objectives.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

The System manages exposure to credit risk generally by instructing fixed income managers to adhere to an overall target weighted average credit quality for their portfolios and by establishing limits on the percentage of the portfolios that are invested in non-investment grade securities. The System's exposure to credit risk as of June 30, 2021 is as follows:

Moody's Issue					
Quality Rating	Agency	CMO	Corporate	Term Loans	Grand Total
A1	\$ -	\$ 940,220	\$ 29,537,802	\$ -	\$ 30,478,023
A2	-	4,564,482	63,251,714	-	67,816,195
A3	-	425,768	41,482,385	-	41,908,154
Aa1	-	2,226,094	7,145,351	-	9,371,445
Aa2	-	7,580,353	30,499,951	-	38,080,304
Aa3	-	3,183,754	14,152,135	-	17,335,888
Aaa	134,457,109	25,171,584	59,154,188	-	218,782,881
B1	-	-	34,377,088	59,168,078	93,545,167
B2	-	-	34,952,003	63,726,576	98,678,579
В3	-	-	25,792,283	17,164,350	42,956,633
Ba1	-	264,635	36,954,658	10,598,476	47,817,769
Ba2	-	-	25,629,572	10,913,152	36,542,724
Ba3	-	-	29,585,716	14,873,308	44,459,024
Baa1	-	-	53,177,743	4,919,515	58,097,258
Baa2	-	-	81,285,421	-	81,285,421
Baa3	-	-	84,910,970	529,391	85,440,361
Caa1	-	-	14,390,764	3,372,365	17,763,129
Caa2	-	-	7,444,294	-	7,444,294
Caa3	-	-	1,426,830	-	1,426,830
Not rated	28,639,997	1,034,036	24,445,596	8,742,865	62,862,494
Grand Total	\$ 163,097,106	\$ 45,390,927	\$ 699,596,465	\$ 194,008,076	\$ 1,102,092,573

Ratings provided by Moody's Investors Service

An emerging market debt portfolio totaling \$186,847,642 at June 30, 2021 and held within a collective unit trust had an overall average credit quality rating of Baa2 (Moody's).

Investments in commercial paper totaling \$4,258,566 at June 30, 2021 were rated P1 (Moody's).

(f) Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of investments in a single issuer. There is no single issuer exposure within the System's pooled investment trust that comprises 5% of the overall portfolio.

(g) Custodial Credit Risk

For an investment, custodial credit risk is the risk that, in the event of the failure of a counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. At June 30, 2021, all securities were registered in the name of the System (or in the nominee name of its custodial agent) and were held in the possession of the System's custodial bank, Bank of New York Mellon.

(h) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. Portfolios are diversified to limit foreign currency and security risk. The System may enter into foreign currency exchange contracts to minimize the short-term impact of foreign currency fluctuations on foreign investments. The System's exposure to foreign currency risk at June 30, 2021, is detailed in the following table. In addition to the foreign currency exposure highlighted in the following table, certain hedge fund investments may have foreign currency exposure.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

Foreign Currency Risk

	Commingled			Emerging						(Corporate	
Currency	Funds	Equities	\mathbf{M}	larkets Debt	Pr	ivate Equity	Cash	F	utures		Bonds	Total
Australian Dollar	\$ 45,695,227	\$ 23,761,152	\$	(1,404,973)	\$	-	\$ (129,086)	\$	5,518	\$	-	\$ 67,927,838
Brazilian Real	29,870,171			8,748,566								38,618,737
Canadian Dollar	73,650,328	61,560,126		(1,408,439)		1,705,363	(121,230)		(2,338)			135,383,810
Chilean Peso	2,215,165			3,285,313								5,500,478
Chinese Yuan	16,597,292			11,065,506								27,662,798
Colombian Peso	1,350,353			5,122,135								6,472,488
Czech Republic Koruna	688,934			4,404,314								5,093,248
Danish Krone	16,229,480	17,128,326		, - ,-			1,948					33,359,754
Egyptian Pound	458,347	., ., .		1,360,925			,-					1,819,272
Euro Currency	209,801,253	135,470,226		(2,000,682)		94,924,953	2,478,499		70,471		5,243,087	445,987,808
Great Britain Pound	,	48,702,760		(=,===,===)		- 1,- = 1,- = -	329,745		16,939		-,,	49,049,445
Hong Kong Dollar	163,943,219	15,884,715					(80,364)		6,963			179,754,533
Hungarian Forint	1,448,836	10,00 .,710		4,680,040			(00,501)		0,702			6,128,876
Indian Rupee	57.325.761			914,811								58,240,572
Indonesia Rupiah	6,259,079			10,171,081								16,430,160
Israeli Shekel	2,151,467			,,			340					2,151,806
Japanese Yen	147,809,953	96,247,592					766,120		19,428			244,843,093
Kazakhstani Tenge	147,000,000	70,217,372		389,906			700,120		17,420			389,906
Kuwaiti Dinar	2,893,391			307,700								2,893,391
Malaysian Ringgit	7,000,636											7,000,636
Mexican Peso	9,972,393			9,574,522								19,546,915
New Taiwan Dollar	79,121,175			9,374,322								79,121,175
New Zealand Dollar	1,527,151	5,456,552		(1,412,402)			4,703					5,576,004
Norwegian Krone	4,056,369	3,430,332		(1,412,402)			1,070					4,057,439
Pakistani Rupee	112,450						1,070					112,450
Peruvian Nouveau Sol	112,430			2,488,421								,
	2 625 115			2,488,421								2,488,421
Philippine Peso	3,625,115			0.122.542								3,625,115
Polish Zloty	4,028,650			8,132,543								12,161,193
Qatari Real	3,535,389											3,535,389
Romanian Ieu				3,355,194								3,355,194
Russian Ruble	12,440,253			7,934,127								20,374,380
Saudi Riyal	16,370,721											16,370,721
Singapore Dollar	6,650,004	7,730,499		1,840,364			35,957					16,256,824
Swedish Krona	23,856,257	20,704,633					771,980		3,752			45,336,622
Swiss Franc	59,989,964	48,925,352					51,184					108,966,500
South African Rand	19,670,702			7,456,908			1					27,127,611
South Korean Won	74,682,885			923,763								75,606,648
Thailand Baht	9,048,444			9,198,067								18,246,511
Turkish Lira	1,448,317			1,390,115								2,838,432
United Arab Emirates Dirham	3,929,041											3,929,041
United Kingdom Pound Sterling	93,472,890											93,472,890
Total	\$ 1,212,927,060	\$ 481,571,933	\$	96,210,125	\$	96,630,316	\$ 4,110,868	\$	120,733	\$	5,243,087	\$ 1,896,814,123
United States	86,866,071	735,080		90,637,517								
Grand Total	\$ 1,299,793,131	\$ 482,307,013	\$	186,847,642								

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

(i) Derivatives and Other Similar Investments

Certain of the System's investment managers are allowed to invest in derivative type transactions consistent with the terms and limitations governing their investment objective and related contract specifications. Derivatives and other similar investments are financial contracts whose value depends on one or more underlying assets, reference rates, or financial indices.

The System's derivative investments include forward foreign currency transactions, futures contracts, options, rights, and warrants. The System enters into these transactions to enhance performance, rebalance the portfolio consistent with overall asset allocation targets, gain or reduce exposure to a specific market, or mitigate specific risks.

Forward foreign currency contracts – The System enters into foreign currency exchange contracts to minimize the short-term impact of foreign currency fluctuations on foreign investments. A currency forward is a contractual agreement to pay or receive specific amounts of foreign currency at a future date in exchange for another currency at an agreed upon exchange rate. If not offset by a corresponding position with the opposite currency exposure, these contracts involve risk in excess of the amount reflected in the System's Statements of Fiduciary Net Position. The face or contract amount in U.S. dollars reflects the total exposure the System has in currency contracts. The U.S. dollar value of forward foreign currency contracts is determined using forward currency exchange rates supplied by a quotation service. Losses may arise due to changes in the value of the foreign currency or if the counterparty does not perform under the contract.

Futures contracts – The System uses futures to manage its exposure to the domestic and international equity, money market, and bond markets and the fluctuations in interest rates and currency values. Futures are also used to obtain target market exposures in a cost-effective manner and to narrow the gap between the System's actual cash exposures and the target policy exposures. Using futures contracts in this fashion is designed to reduce (or hedge) the risk of the actual plan portfolio deviating from the policy portfolio more efficiently than by using cash securities. The program is only used to manage intended exposures and asset allocation rebalancing.

Buying futures tends to increase the System's exposure to the underlying instrument. Selling futures tends to decrease the System's exposure to the underlying instrument or hedge other System investments. Losses may arise due to movements in the underlying or reference markets.

Credit Default Swaps – A credit manager may use credit default swaps in the portfolio to either obtain exposure to the high yield market efficiently (i.e. by selling protection) at a similar or better price than what can be obtained in cash bonds, or to hedge the credit risk of the portfolio (i.e. buying protection).

Through commingled funds, the System also indirectly holds derivative type instruments, primarily equity index futures.

Additionally, the System is an investor in a private investment fund that writes collateralized put options on both U.S. indices, including the S&P 500® Index and the Russell 2000® Index, and exchange traded funds. The advisor attempts to generate returns through the receipt of option premiums from selling puts, as well as through investments in fixed income instruments, which collectively are intended to reduce volatility relative to what it would be if the fund held the underlying equity index on which the options are written.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

5. Investments – Pooled Investment Trust (continued)

The System invests in mortgage-backed securities, which are included in the categories described as collateralized mortgage obligations and U.S. Government Agency Securities. These securities are based on the cash flows from interest and principal payments by the underlying mortgages. As a result, they are sensitive to prepayments by mortgagees, which are likely in declining interest rate environments, thereby reducing the value of these securities.

Additional information regarding interest rate risks for these investments is included in Note 5(d) *Interest Rate Risk*.

The System may sell a security in anticipation of a decline in the fair value of that security or to lessen the portfolio allocation of an asset class. Short sales may increase the risk of loss to the System when the price of a security underlying the short sale increases and the System is obligated to deliver the security in order to cover the position.

The following summarize the System's exposure to specific derivative investments at June 30, 2021.

Investment Derivative Instruments		ange in fair ue included nvestment income	 ir Value at e 30, 2021	Notional Amount		
Fixed income futures - long	\$	2,204,486	\$ 2,259,822	\$	226,399,727	
Equity index futures - long		(250,719)	376,970		23,526,975	
Equity index futures - short		348,971	(104,459)		(41,754,733)	
Credit default swaps (index)		4,294,075	4,294,704		-	
Total	\$	6,596,813	\$ 6,827,037			
Foreign Currency Forward contracts Paya Pending (liability) Pending receivable (asset)	able		\$ 1,024,802 (52,819)			
Total			\$ 971,983			

The System is exposed to counterparty risk on foreign currency contracts that are in asset positions. The aggregate fair value of derivative instruments in asset positions at June 30, 2021 was \$971,983. This represents the maximum loss that would be recognized if all counterparties failed to perform as contracted. Risk is mitigated by using a continuous linked settlement process.

The System executes (through its investment managers) derivative instruments with various counterparties. The credit ratings of five counterparties were Aa2 (Moody's) and one counterparty was Aa3 (Moody's).

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

6. Other Investments – Defined Contribution Plan

The State Investment Commission selected various investment options for defined contribution plan participants with the overall objective of offering low-cost, strategic, and long-term oriented investment products. Plan participants can choose one or more of the various options and can change options at any time. Plan participants who do not elect a specific option default to a target date retirement fund consistent with their anticipated Social Security retirement eligibility date.

			% of	Duration
Investment Type		Fair Value	Total	(years)
Annuities				
TIAA Stable Value	\$	21,134,619	1.31%	
Total	\$	21,134,619	1.31%	
Fixed Income Funds				
Pimco Real Return Institutional Class		10,316,419	0.64%	7.71
State Street US Bd Index Sec XIV	_	10,305,664	0.64%	6.57
Total	\$	20,622,084	1.28%	
Target Retirement Funds				
Vanguard Target Retirement 2015 Trust Plus		45,323,228	2.81%	
Vanguard Target Retirement 2020 Trust Plus		134,461,018	8.32%	
Vanguard Target Retirement 2025 Trust Plus		193,741,151	11.99%	
Vanguard Target Retirement 2030 Trust Plus		224,722,777	13.91%	
Vanguard Target Retirement 2035 Trust Plus		261,699,333	16.20%	
Vanguard Target Retirement 2040 Trust Plus		217,085,338	13.44%	
Vanguard Target Retirement 2045 Trust Plus		171,794,486	10.63%	
Vanguard Target Retirement 2050 Trust Plus		107,445,530	6.65%	
Vanguard Target Retirement 2055 Trust Plus		51,893,245	3.21%	
Vanguard Target Retirement 2060 Trust Plus		15,391,032	0.95%	
Vanguard Target Retirement 2065 Trust Plus		1,645,824	0.10%	
Vanguard Target Retirement Income Trust Plus		12,313,203	0.76%	
Total	\$	1,437,516,164	88.97%	
Equity Funds				
Vanguard Social Index Admiral		10,015,252	0.62%	
State Street SP 500 Index Sec II		57,798,766	3.58%	
State Street Sm Mid Index Sec II		45,967,950	2.85%	
State Street Cp Eq ExUS Index II		22,670,164	1.40%	
Total	\$	136,452,132	8.45%	
1 Otal	φ	150,452,152	0.73/0	
Total	\$	1,615,724,999	100.00%	

The majority (98%) of investments held by participants in the defined contribution plan are target date retirement funds, equity or fixed income funds. The target retirement date funds provide for diversified portfolios of equities and bonds that become progressively more conservative as the fund's associated target retirement date approaches. Equity index funds seek to replicate the price and yield performance of a particular index.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

6. Other Investments – Defined Contribution Plan (continued)

The target retirement date and equity and fixed income funds are priced daily based on the traded prices of the underlying securities held within the funds. There are no withdrawal limitations for these funds. These funds are classified as Level 1 investments (quoted prices in active markets for identical assets) within the fair value hierarchy. Annuities are reported at contract value, which approximates fair value. Annuities held by participants within the defined contribution plan are classified as Level 3 investments (significant unobservable inputs) within the fair value hierarchy.

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. At June 30, 2021, all non-annuity assets, including mutual funds, that are traded and held in retirement plans by TIAA were held at TIAA, FSB (formerly TIAA-CREF Trust Company, FSB) as custodian/trustee.

The majority of the defined contribution plan investment options are funds that invest in diversified portfolios of securities including equity and fixed-income investments. For investment options that are solely fixed income, weighted-average maturity or duration have been disclosed as a measure of interest rate risk.

Fixed income funds and are subject to interest rate, inflation and credit risks. Target-date retirement funds share the risks associated with the types of securities held by each of the underlying funds in which they invest including equity and fixed income funds. Funds may have exposure to foreign currency risk through investment in non-US denominated securities.

7. Contributions

Contribution requirements for plan members and employers are established pursuant to Rhode Island General Laws. With the exception of the RIJRFT plan, employers are required to contribute at an actuarially determined rate or a fixed dollar amount for the defined benefit plans. Employer contributions for the defined contribution plan are prescribed by statute. Plan member contributions for the defined benefit and defined contribution plans are fixed by statute. Member and employer contribution rates are subject to amendment by the General Assembly.

(a). Funding Policy

The funding policies, as set forth in Rhode Island General Law, Sections 36-10-2 and 45-21-42 provide for actuarially determined periodic contributions to the plans. The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial liability. The valuation is prepared on the projected benefit basis, under which the present value, at the assumed rate of return (currently 7.0 percent for all plans except the RIJRFT which utilizes a 2.45% assumed rate of return), of each participant's expected benefit payable at retirement or death is determined, based on age, service, gender and compensation.

The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each individual member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. This method is commonly referred to as the Individual Entry Age Actuarial Cost Method.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

7. Contributions (continued)

The unfunded actuarial accrued liability (UAAL) is amortized as a level percent of payroll over a closed period. For underfunded plans, the period is 25 years as measured from June 30, 2010, or 21 years as of the current valuation date for any existing UAAL. Beginning with the June 30, 2014 actuarial valuation, new experience gains and losses for underfunded plans are amortized over individual closed periods of 20 years using the process of "laddering".

Overfunded plans will have an amortization rate calculated using a single base amortized over an open period of 20 years.

(b). Contribution rates

Employer contribution rates for fiscal 2021 for all defined benefit plans were developed based on actuarial valuations performed as of June 30, 2018. Employee contribution rates are statutorily determined.

Rhode Island Judicial Retirement Fund Trust plan is not currently advance funded. Employees make contributions to the plan; however, there are no employer contributions. This plan is for a closed group of individuals and the amortization payment has been calculated based on level-dollar amortization over 17 years from June 30, 2013.

State of Rhode Island State Police Retirement Fund Trust is a closed group of individuals and the annual contributions of \$16,387,092 into the Trust have been calculated based on a level-dollar amortization over 18 years from June 30, 2016.

The table below displays the defined benefit plan contribution rates for the year ended June 30, 2021:

Plan	Employee	Employer				
ERS						
State Employees	3.75%					
	Members with more than 20 yrs of service	27.54%				
	at July 1, 2012 – 11%					
Teachers (note 1)						
LEA funded	3.75%	14.50%				
State funded	Members with more than 20 yrs of service at July 1, 2012 – 11%	10.75%				
TSB	1% of the member's annual salary up to but not exceeding \$11,500	1% of the member's annual salary up to but not exceeding \$11,500				
MERS		3.50				
General	1.00% (additional 1% with a cost-of-living	69 Municipalities, housing authorities, water				
Employees	adjustment)	and sewer districts contributed various				
		actuarially determined rates.				
Public Safety	9.00% (additional 1% with a cost-of-living	52 Municipal police and fire departments				
	adjustment)	contributed various actuarially determined				
		rates.				
SPRBT	8.75%	19.82%				
JRBT	12.00% (8.75% supreme court judges)	21.61%				
RIJRFT	12.00% (8.75% supreme court judges)	\$1,242,086 (Note 2)				
SPRFT	N/A	\$16,387,092				

Note 1 - When teachers' salaries are charged to federal programs 100% of the employer contribution rate is reimbursed through the federal program without a state funded portion.

Note 2 – The State of Rhode Island is not currently funding this plan on an advance funding basis – full actuarially determined employer contributions have not been made to the plan.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

7. Contributions (continued)

The table below displays the defined contribution plan contribution rates for the year ended June 30, 2021:

Plan	Employee	Employer
Defined Contains	Eligible state employees, teachers, and MERS general employees participating in social security – 5%	1% to 1.5% based on years of service
Contribution Plan	Teachers and MERS general employees not covered by social security – 7%	3% to 3.5% based on years of service
	MERS police and fire employees not covered by social security – 3%	3%

Effective July 1, 2015, members of the defined contribution plan who had 20 or more years of service as of July 1, 2012, remained as plan participants but no longer contributed to the plan (both employee and employer contributions).

(c). Contributions from Non-employer Contributing Entity

Within the ERS plan, the State of Rhode Island, as a non-employer contributing entity, makes a contribution for teachers employed by local educational agencies. This is considered a special funding situation wherein the State, by statute, has assumed responsibility to fund approximately 40% of the annual required employer contribution for teachers.

(d). Supplemental Contributions

The General Laws (Section 36-10-2(e) 1 and 2) also require, in addition to the contributions provided for by the funding policy, for each fiscal year in which the actuarially determined state contribution rate for state employees and teachers, including state contributions to the defined contribution plan, is lower than that for the prior fiscal year, the governor shall include an appropriation to that system equivalent to twenty percent (20%) of the rate reduction to be applied to the actuarial accrued liability. The amounts to be appropriated shall be included in the annual appropriation bill and shall be paid by the general treasurer into the retirement system. The retirement system's actuary shall not adjust the computation of the annual required contribution for the year in which supplemental contributions are received; such contributions once made may be treated as reducing the actuarial liability remaining for amortization in the next following actuarial valuation to be performed. For fiscal 2021, there were no monies contributed to the System in accordance with this provision of the General Laws.

The Retirement Security Act provides for additional contributions to the System based on 5.5% of the value of contracts where the services performed by the contractor were previously performed by state employees. A supplemental contribution of \$190,609 was paid to the System pursuant to Section 42-149-3.1 of the General Laws.

(e). New Employer Contributions

During fiscal 2021, one new unit was established within the MERS plan. Upon joining MERS, that unit made an initial contribution of \$1,232,204 which is reflected separately from other required actuarially determined employer contributions on the accompanying financial statements.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

8. Net Pension Liability (Asset) of the Participating Employers

The components of the net pension liability of the employers participating in the various plans of the System at June 30, 2021 were as follows:

Plan	Total Pension Liability	Plan Fiduciary Net Position	Employers' Net Pension Liability (Asset)	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
ERS				
State Employee	\$ 4,835,772,488	\$ 3,057,226,491	\$ 1,778,545,997	63.2%
Teacher	7,025,039,500	4,671,641,313	2,353,398,187	66.5%
SPRBT	199,555,312	196,304,642	3,250,670	98.4%
JRBT	94,114,838	101,371,283	(7,256,445)	107.7%
RIJRFT	23,524,834	1,419,660	22,105,174	6.0%
SPRFT	168,432,304	23,499,498	144,932,806	14.0%
TSB	228,280,538	423,973,743	(195,693,205)	185.7%
MERS				
General Employees	1,325,219,363	1,271,635,384	53,583,979	96.0%
Municipal Police/Fire	881,319,721	807,915,220	73,404,501	91.7%

a. Actuarial assumptions

The total pension liability for all defined benefit plans was determined by actuarial valuations performed as of June 30, 2020 and rolled forward to June 30, 2021 using generally accepted actuarial principles, except for one new MERS unit that is based on an actuarial valuation performed as of June 30, 2021.

The actuarial assumptions used in the calculation of the total pension liability at the June 30, 2021 measurement date were consistent with the 2019 Actuarial Experience Investigation Study for the six-year period ended June 30, 2019 as approved by the System's Board on May 22, 2020.

The following table summarizes the actuarial assumptions applied to all periods included in the measurement.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

8. Net Pension Liability (Asset) of the Participating Employers (continued)

Summary of Actuarial Assumptions Used in the June 30, 2021 measurement date valuations to determine the Net Pension Liability (Asset)										
	EI		MERS	SPRBT	JRBT	RIJRFT	TSB	SPRFT		
	State Employees	Teachers								
Valuation Date June 30, 2020 valuation rolled forward to the June 30, 2021 measurement date (1).										
Actuarial Cost Method Entry Age Normal - the Individual Entry Age Actuarial Cost methodology is used.										
Amortization Method	Level Percent of Payroll – Closed Level Dollar Dollar							Level Dollar		
Actuarial Assum	ptions:									
Investment Rate of Return	7.0%	7.0%	7.00%	7.0%	7.0%	2.45%	7.00%	7.00%		
Projected	3.25%	3.0%	<u>General</u>	3.75%	2.75%	2.75%	3.0%			
Salary	to	to	<u>Employees</u>	to			to			
Increases (1)	6.25%	13.0%	3.25% to 7.25%	11.75%			13.0%			
			<u>Police & Fire</u>							
			<u>Employees</u>							
			4.00% to 14.00%							
Inflation				2.5%						
Mortality	Variant	ts of the PUB (1	0) Tables for Healthy a	and Disabled I	Retirees, proje	ected with Scale	Ultimate MI	P16.		

- (1) For one new MERS unit joining in fiscal 2021, a June 30, 2021 valuation was used.
- (2) Overall wage inflation 3.00% per year composed of an assumed 2.50% inflation assumption rate and a 0.50% general productivity component. This assumption represents wage information for the economy as a whole and is used as a starting point for determining other wage related assumptions and is used as the rate of growth for new entrant salaries in any open group projections.
- (3) Cost of Living Adjustments All future COLAs were assumed to be 2.1% per annum for all MERS units with the COLA provision. For the TSB plan, a 2.5% COLA was assumed. For all other plans, it was assumed that the COLA was suspended for seven years and that it would be 2.1% thereafter.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

8. Net Pension Liability (Asset) of the Participating Employers (continued)

The long-term expected rate of return best-estimate on pension plan investments was determined by the actuary using a building-block method. The actuary started by calculating best-estimate future expected real rates of return (expected returns net of pension plan investment expense and inflation) for each major asset class, based on a collective summary of capital market expectations from 39 sources. The June 30, 2021 expected arithmetic returns over the long-term (20 years) by asset class are summarized in the following table:

Asset Class	Long-Term Target Asset Allocation	Long-Term Expected Arithmetic Real Rate of Return
GROWTH		
Global Equity		
US Equity	23.20%	5.83%
International Developed Equity	11.80%	6.35%
Emerging Markets Equity	5.00%	8.04%
Sub-total	40.00%	
Private Growth		
Private Equity	11.25%	9.47%
Non-Core Real Estate	2.25%	5.32%
Opportunistic Private Credit	1.50%	9.47%
Sub-total	15.00%	•
INCOME		
High Yield Infrastructure	1.00%	3.19%
REITS	1.00%	5.32%
Equity Options	2.00%	5.59%
EMD (50/50 Blend)	2.00%	1.96%
Liquid Credit	2.80%	3.19%
Private Credit	3.20%	3.19%
Sub-total	12.00%	
STABILITY		
Crisis Protection Class		
Treasury Duration	5.00%	-0.32%
Systematic Trend	5.00%	3.39%
Sub-total	10.00%	•
Inflation Protection		
Core Real Estate	3.60%	5.32%
Private Infrastructure	2.40%	5.81%
TIPs	2.00%	0.30%
Sub-total	8.00%	•
Volatility Protection		
IG Corp Credit	3.25%	1.14%
Securitized Credit	3.25%	1.14%
Absolute Return	6.50%	3.39%
Cash	2.00%	-0.32%
Sub-total	15.00%	
Total	100.00%	

These return assumptions are then weighted by the target asset allocation percentage, factoring in correlation effects, to develop the overall long-term expected rate of return best-estimate on an arithmetic basis.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

8. Net Pension Liability (Asset) of the Participating Employers (continued)

b. Discount rate

The discount rate used to measure the total pension liability of the plans was 7.0 percent for all but the RIJRFT plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from the employers will be made at statutorily required rates, actuarially determined. Based on those 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.

For the RIJRFT plan, the State has not opted to make actuarially determined employer contributions and based on those assumptions, the pension plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members. Consequently, for the RIJRFT plan, the municipal bond index rate, based on fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" (1.92% at June 30, 2021) was applied to all periods of projected benefit payments to determine the total pension liability.

c. Sensitivity of the net pension liability (asset) to changes in the discount rate

The following presents the net pension liability (asset) of the employers calculated using the discount rate of 7.0 percent (for all plans except the RIJRFT), as well as what the employers' net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate. The RIJRFT plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members and consequently the municipal bond index rate of 1.92% at June 30, 2021 was used in the determination of the net pension liability for that plan with a similar +1/-1% sensitivity analysis.

Plan	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
ERS			
State Employees	\$ 2,205,234,363	\$ 1,778,545,997	\$ 1,233,988,900
Teacher	2,972,161,682	2,353,398,187	1,563,679,138
MERS			
General Employees	169,155,975	53,583,979	(93,922,358)
Municipal Police/Fire	148,733,241	73,404,501	(22,730,042)
SPRBT	20,219,012	3,250,670	(18,406,347)
JRBT	816,038	(7,256,445)	(17,557,055)
SPRFT	160,168,252	144,932,806	125,489,117
TSB	(175,986,304)	(195,693,205)	(220,853,159)
	1.00% Decrease (0.92%)	Current Discount Rate (1.92%)	1.00% Increase (2.92%)
RIJRFT	\$ 24,125,392	\$ 22,105,174	\$ 19,661,516

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

9. Administrative Expenses

Pursuant to General Law section 36-8-10.1, administrative costs of the System are financed through investment earnings up to a maximum of 0.175% of the average total investments before lending activities as reported in the annual report of the Auditor General for the next preceding five (5) fiscal years. Such amounts are transferred to a restricted receipt account within the State's general fund. Any unencumbered funds on June 30 of any fiscal year are credited to the plans in the same proportion as their contributions to the restricted receipt account.

Administrative expenses allocated to the System include personnel costs for employees of the Office of the General Treasurer who, in whole or in part, are involved in administering the System. The personnel costs allocated to the System include the employer share of actuarially determined contributions to the defined benefit pension plan (Employees' Retirement System Plan for State Employees) and the defined benefit post-employment health care plan, a cost sharing multiple employer plan administered through the Rhode Island State Employees' and Electing Teachers OPEB System (OPEB System). Required contributions to the defined contribution pension plan are also included in the allocated personnel costs. The State does not include any proportionate share of the net pension liability or net OPEB liability for cost-sharing pension and OPEB plans in the fiduciary funds of the State. The long-term pension and OPEB liabilities are reflected in the governmental activities of the State's government-wide financial statements.

The employer cost for employees participating in the State Employees' System defined benefit pension plan was 27.54% of covered payroll for fiscal 2021. Employer contributions to the defined benefit pension plan, included as administrative costs for the years ended June 30, 2021, 2020 and 2019 were \$1,109,427, \$1,028,786, and \$972,024, respectively, which represents 100% of the annual required contributions. The employer cost for employees participating in the System's defined contribution pension plan was 1% to 1.5% of covered payroll based on years of service for fiscal 2021. Effective July 1, 2015, members of the defined contribution plan who had 20 or more years of service as of July 1, 2012, remained as plan participants but no longer contributed to the plan (both employee and employer contributions). Employer contributions to the defined contribution pension plan, included as administrative costs for the years ended June 30, 2021, 2020 and 2019 were \$37,163, \$36,531, and \$33,996, respectively, which represents 100% of the annual required contributions.

The employer cost for employees participating in the State Employees' OPEB plan was 5.49% of covered payroll for fiscal 2021. Employer contributions to the OPEB plan, included as administrative costs for the years ended June 30, 2021, 2020 and 2019 were \$241,708, \$264,373, and \$227,964 respectively, which represents 100% of the annual required contributions.

The OPEB system issues a stand-alone, publicly available financial report that includes the financial statements and required supplementary information including descriptions of benefit provisions and information about the measurement of the net OPEB liability. A copy of the report can be obtained from the Office of Accounts and Control, One Capitol Hill, Providence, RI 02903.

Administrative expenses of the System, financed as previously described, include \$1,758,233 of expenses related to oversight of the System's investment portfolio. Consistent with generally accepted accounting principles, these expenses have been included with investment expenses on the accompanying financial statements.

For fiscal year 2021, the administrative costs of the defined contribution plan were financed solely by participant fees. Fees paid to TIAA-CREF via participant fees for fiscal year ended June 30, 2021 were \$1,555,397 excluding plan transfers. From these participant fees, \$216,905 was transferred to the State of Rhode Island to fund the fiscal 2021 operating expenses of the Office of the General Treasurer related to the administration of the defined contribution plan.

Notes to the Financial Statements - Fiscal Year Ended June 30, 2021

10. Commitments

The State Investment Commission has committed to fund certain private equity, real estate, and infrastructure investment managers at a predetermined subscription amount. Outstanding unfunded investment commitments at June 30, 2021 totaled \$1.6 billion. These commitments will be funded through cash available within the pooled investment trust generated through investment income and/or liquidation of other investments.

The system's investments in hedge funds are generally subject to "lock-up" provisions that limit (subject to certain exceptions) the ability to withdraw amounts previously invested for a period of one to three years after the initial investment. The system's investments in hedge fund assets are available for redemption on a monthly, quarterly, semi-annual or annual basis, and are subject to notice periods which vary by fund and range from 30 days to 75 days. Some funds limit redemptions to 25% of invested capital on any one redemption date. At June 30, 2021 \$738,491 was in liquidation.

The System is committed under a ten-year development and operating agreement to design, transition, and implement new line-of-business, general ledger accounting system, and payroll administration systems. The contract requires monthly payments through fiscal 2025. Total payments over the contract period are estimated at \$22 million.

11. Related Parties

The State Investment Commission, which sets investment policy and oversees the investments of the System, created three limited liability companies to account for assets invested by managers within its Crisis Protection Class – Trend Following. The System is the sole equity member in each of the limited liability companies. The System's investment is reported at the net asset value based on independently audited financial statements as of June 30, 2021.

12. Contingencies

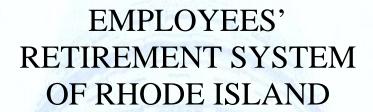
Legal Challenges to Pension Reform - The 2009, 2010 and 2011 legislative pension reforms resulted in numerous lawsuits against the State brought by current and retired employees, as well as their unions. Of these lawsuits, two remain pending as described below.

In September 2014, a case challenging RIRSA was commenced by the Rhode Island State Troopers Association and Rhode Island State Troopers Association ex rel. Kevin M. Grace and Ernest E. Adams in Superior Court against the State and ERSRI as co-defendants. In 2019, the co-defendants filed motions to dismiss. The hearing on the motions to dismiss were heard December 13, 2019. A decision on the motions has not been rendered.

In March 2020, a case challenging RIRSA and/or the settlement agreement was commenced by numerous plaintiffs who were part of the class action in the Rhode Island Federal District Court against the State and ERSRI as co-defendants. The State and ERSRI filed a motion to dismiss, which was granted. Plaintiffs have filed an appeal of the decision which is pending before the United States Court of Appeals for the First Circuit.

13. Subsequent events

The System has evaluated subsequent events through December 22, 2021, the date the statements were available to be issued.



Required Supplementary Information

Schedules of Changes in the Participating Employers'
Net Pension Liability (Asset)

Schedules of Investment Returns

Schedules of Employer and Other Nonemployer Entity
Contributions

Notes to Required Supplementary Information

Schedules of Changes in the Participating Employers' Net Pension Liability Employees' Retirement System Plan

	2	021	20	20	20	19	20	18
	State Employees	Teachers						
Total Pension Liability								_
Service Cost	\$ 60,457,896	\$ 82,403,921	\$ 63,748,227	\$ 83,770,752	\$ 61,954,710	\$ 83,247,093	\$ 61,430,436	\$ 82,924,148
Interest	325,722,160	475,374,697	326,188,559	477,306,043	322,077,303	473,000,055	317,996,827	464,922,181
Benefit Changes	-	-	-	-	-	· · ·	-	-
Differences between expected and actual experience	(1,359,514)	(38,707,672)	2,916,361	(28,223,867)	15,518,855	(7,814,369)	18,658,150	54,088,887
Changes of assumptions	_	_	(55,472,975)	(71,972,090)	_	-	-	_
Benefit payments	(343,985,646)	(487,793,158)	(340,810,054)	(487,783,008)	(342,620,725)	(486,577,981)	(337,489,367)	(486,818,998)
Net change in Total Pension Liability	\$ 40,834,896		\$ (3,429,882)	,	. , , ,	\$ 61,854,798	\$ 60,596,046	\$ 115,116,218
Total pension liability - beginning	4,794,937,592	6,993,761,712	4,798,367,474	7,020,663,882	4,741,437,331	6,958,809,084	4,680,841,285	6,843,692,866
Total pension liability - ending	\$ 4,835,772,488	\$ 7,025,039,500	\$ 4,794,937,592	\$ 6,993,761,712	\$ 4,798,367,474	\$ 7,020,663,882	\$ 4,741,437,331	\$ 6,958,809,084
								_
Plan Fiduciary Net Position								
Employer contributions	\$ 204,285,120					\$ 249,634,988		
Employee contributions	39,436,591	49,381,014	40,930,636	49,954,869	39,830,923	50,213,121	39,996,527	49,906,906
Net investment income	639,291,421	1,038,696,843	92,022,240	143,922,968	157,159,868	237,724,787	188,629,584	286,398,383
Benefit payments	(343,985,646)	(487,793,158)	(340,810,054)	(487,783,008)	(342,620,725)	(486,577,981)	(337,489,367)	(486,818,998)
Transfers of member contributions								
Administrative expenses	(2,597,029)			(4,026,006)	(2,558,265)	(3,869,709)	(2,544,260)	(3,862,978)
Transfers to affiliated systems	(74,173)		(804,393)	(69,798)		359,298	1,456,519	(424,248)
Other	78,162	6,312	164,308	16,421	79,332	849,710	124,217	869,209
Net change in fiduciary net position	\$ 536,434,446	\$ 872,885,412	\$ (11,153,419)	\$ (31,139,233)	\$ 41,312,291	\$ 48,334,214	\$ 64,547,375	\$ 85,160,369
Plan Fiduciary net position - beginning	\$ 2,520,792,045	\$ 3,798,755,901	\$ 2,531,945,464	\$ 3,829,895,134	\$ 2,490,633,173	\$ 3,781,560,920	\$ 2,426,085,798	\$ 3,696,400,551
Plan Fiduciary net position - ending	\$ 3,057,226,491	\$ 4,671,641,313	\$ 2,520,792,045	\$ 3,798,755,901	\$ 2,531,945,464	\$ 3,829,895,134	\$ 2,490,633,173	\$ 3,781,560,920
Net Pension Liability	\$ 1,778,545,997	\$ 2,353,398,187	\$ 2,274,145,547	\$ 3,195,005,811	\$ 2,266,422,010	\$ 3,190,768,748	\$ 2,250,804,158	\$ 3,177,248,164
Plan Fiduciary Net Position as a percentage								
of the total pension liability	63.2%	66.5%	52.6%	54.3%	52.8%	54.6%	52.5%	54.3%
Covered payroll	\$ 739,998,727	\$ 1,091,442,659	\$ 755,310,749	\$ 1,080,912,926	\$ 718,732,131	\$ 1,060,472,523	\$ 691,006,031	\$ 1,031,394,874
Net pension liability as a percentage of	240.20	215.52	201.10	205 604	215 224	200.00	205 524	200.10/
covered payroll	240.3%	215.6%	301.1%	295.6%	315.3%	300.9%	325.7%	308.1%

See notes to required supplementary information.

Schedules of Changes in the Participating Employers' Net Pension Liability Employees' Retirement System Plan

	20)17	20	16	20	15	20	14
	State Employees	Teachers	State Employees	Teachers	State Employees	Teachers	State Employees	Teachers
Total Pension Liability								
Service Cost	\$ 58,715,260	\$ 79,219,202	\$ 59,017,905	\$ 78,445,027	\$ 58,003,597	\$ 73,780,964	\$ 56,795,525	\$ 73,917,744
Interest	320,346,656	471,638,608	320,857,388	471,001,292	312,489,666	457,901,918	309,695,399	454,525,784
Benefit Changes	-	-	-	-	102,727,033	148,006,628	· · · · · -	-
Differences between expected and actual experience	(6,891,246)	(29,762,014)	(48,986,533)	\$ (50,843,400)	(28,729,479)	(20,696,669)	-	-
Changes of assumptions	235,517,482	318,950,799	-	-	-	-	(23,761,746)	(98,423,775)
Benefit payments	(337,555,977)	(490,517,793)	(337,538,418)	(490,467,141)	(329,318,255)	(482,865,966)	(330,357,881)	(483,854,062)
Net change in Total Pension Liability	\$ 270,132,175	\$ 349,528,802		. , , ,	\$ 115,172,562	\$ 176,126,875	\$ 12,371,297	\$ (53,834,309)
Total pension liability - beginning	4,410,709,110	6,494,164,064	4,417,358,768	6,486,028,286	4,302,186,206	6,309,901,411	4,289,814,909	6,363,735,720
Total pension liability - ending	\$ 4,680,841,285	\$ 6,843,692,866	\$ 4,410,709,110	\$ 6,494,164,064	\$ 4,417,358,768	\$ 6,486,028,286	\$ 4,302,186,206	\$ 6,309,901,411
Plan Fiduciary Net Position								
Employer contributions	\$ 176.093.310	\$ 233,828,518	\$ 159,534,421	\$ 225,569,556	\$ 155,901,921	\$ 217,902,736	\$ 151,660,705	\$ 197,869,704
Employee contributions Employee contributions	41,537,793	50,071,218	41,021,592	49,502,952	28,477,668	36,470,893	28,105,658	36,306,239
Net investment income	259,237,475	394,975,442	(3,122,838)	(4,788,264)		88,131,991	340,085,721	522,960,223
Benefit payments	(337,555,977)	(490,517,793)		(490,467,141)		(482,865,966)	(330,357,881)	(483,854,062)
Transfers of member contributions	-	-	-	-	-	-	303,014	(290,471)
Administrative expenses	(2,533,747)	(3,860,429)	(2,259,017)	(3,463,764)	(2,394,922)	(3,676,564)	(2,234,676)	(3,436,330)
Transfers to affiliated systems	680,142	390,872	(252,093)	252,093	(107,668)	145,179	-	-
Other	180,663	926,185	132,016	955,508	673,125	1,016,295	182,841	129,791
Net change in fiduciary net position	\$ 137,639,659	\$ 185,814,013	\$ (142,484,337)	\$ (222,439,060)	\$ (89,350,773)	\$ (142,875,436)	\$ 187,745,382	\$ 269,685,094
Plan Fiduciary net position - beginning	\$ 2,288,446,139	\$ 3,510,586,538	\$ 2,430,930,476	\$ 3,733,025,598	\$ 2,520,281,249	\$ 3,875,901,034	\$ 2,332,535,867	\$ 3,606,215,939
Plan Fiduciary net position - ending	\$ 2,426,085,798	\$ 3,696,400,551	\$ 2,288,446,139	\$ 3,510,586,538	\$ 2,430,930,476	\$ 3,733,025,598	\$ 2,520,281,249	\$ 3,875,901,033
Net Pension Liability	\$ 2,254,755,487	\$ 3,147,292,315	\$ 2,122,262,971	\$ 2,983,577,526	\$ 1,986,428,292	\$ 2,753,002,688	\$ 1,781,904,957	\$ 2,434,000,378
Plan Fiduciary Net Position as a percentage of the total pension liability Covered payroll Net pension liability as a percentage of	51.8% \$ 683,530,388	54.0% \$ 1,010,449,004	51.9% \$ 671,420,995	54.1% \$ 980,562,840	55.0% \$ 669,787,489	57.6% \$ 966,985,115	58.6% \$ 653,573,357	61.4% \$ 951,322,312
covered payroll	329.9%	311.5%	316.1%	304.3%	296.6%	284.7%	272.6%	255.9%

See notes to required supplementary information.

Schedules of Changes in the Participating Employers' Net Pension Liability (Asset)

Teachers' Survivors Benefits Plan

	2021		2020		2019		2018	2017	2016	2015		2014
Total Pension Liability												
Service Cost	\$ 1,506,774	\$	1,673,864	\$	1,673,826	\$	1,729,578	\$ 2,154,632	\$ 2,151,235	\$ 2,134,663	\$	2,193,930
Interest	15,296,468		15,490,550		16,383,892		15,761,211	15,439,481	14,803,900	12,500,416		11,958,890
Benefit Changes	-		-		-		-	19,564,182	-	-		-
Differences between expected and actual experience	(562,109)		756,794		(19,959,752)		1,716,443	(23,870,746)	-	24,212,282		-
Changes of assumptions	-		(9,367,348)		-		-	15,500,130	-	-		-
Benefit payments	(11,456,351)		(11,029,497)		(10,690,518)		(9,877,314)	(8,672,172)	(8,292,668)	(7,992,381)		(7,622,990)
Net change in Total Pension Liability	4,784,782		(2,475,637)		(12,592,552)		9,329,918	20,115,507	8,662,467	30,854,980		6,529,830
Total pension liability - beginning	223,495,756		225,971,393		238,563,945		229,234,027	209,118,520	200,456,053	169,601,073		163,071,243
Total pension liability - ending	\$ 228,280,538	\$	223,495,756	\$	225,971,393	\$	238,563,945	\$ 229,234,027	\$ 209,118,520	\$ 200,456,053	\$	169,601,073
Plan Fiduciary Net Position												
Employer contributions	\$ 736,193	\$	745,760	\$	745,856	\$	744,035	\$ 589,883	\$ 642,276	\$ 603,388	\$	609,168
Employee contributions	736,193		745,760		745,856		744,035	589,883	642,276	603,388		609,168
Net investment income	92,054,850		12,730,241		21,155,071		24,552,338	33,277,060	(51,004)	6,951,465		39,657,338
Benefit payments	(11,456,351)		(11,029,497)		(10,690,518)		(9,877,314)	(8,672,172)	(8,292,668)	(7,992,381)		(7,622,990)
Administrative expenses	(356,460)		(350,178)		(332,273)		(330,288)	(309,283)	(267,475)	(276,010)		(260,585)
Other	 1		-		-		-	5	(1)	-		
Net change in fiduciary net position	\$ 81,714,426	\$	2,842,086	\$	11,623,992	\$	15,832,806	\$ 25,475,376	\$ (7,326,596)	\$ (110,150)	\$	32,992,099
Plan Fiduciary net position - beginning	\$ 342,259,317	\$	339,417,231	\$	327,793,239	\$	311,960,433	\$ 286,485,057	\$ 293,811,653	\$ 293,921,803	\$	260,929,704
Plan Fiduciary net position - ending	\$ 423,973,743	\$	342,259,317	\$	339,417,231	\$	327,793,239	\$ 311,960,433	\$ 286,485,057	\$ 293,811,653	\$	293,921,803
Net Pension Liability (Asset)	\$ (195,693,205)	\$	(118,763,561)	\$	(113,445,838)	\$	(89,229,294)	\$ (82,726,406)	\$ (77,366,537)	\$ (93,355,600)	\$	(124,320,730)
Plan Fiduciary Net Position as a percentage of the total pension liability (asset) Covered payroll Net pension liability (asset) as a percentage of	\$ 185.7% 603,150,124	\$	153.1% 590,286,509	\$	150.2% 576,424,716	\$	137.4% 557,928,457	\$ 136.1% 538,657,952	\$ 137.0% 581,414,779	\$ 146.6% 561,753,409	\$	173.3% 563,134,080
covered payroll	-32.4%		-20.1%		-19.7%		-16.0%	-15.4%	-13.3%	-16.6%		-22.1%

 $See\ notes\ to\ required\ supplementary\ information.$

Schedules of Changes in the Participating Employers' Net Pension Liability State Police Retirement Benefits Trust Plan

		2021		2020		2019		2018		2017		2016		2015		2014
Total Pension Liability																
Service Cost	\$	5,826,983	\$	5,788,358	\$	5,342,133	\$	4,999,127	\$	4,497,800	\$	4,316,597	\$	4,198,214	\$	5,121,964
Interest		13,110,255		12,404,907		11,590,039		10,763,319		9,392,637		9,057,956		8,540,146		7,767,937
Benefit Changes		-		-		-		-		-		-		1,169,580		_
Differences between expected and actual experience		(321,912)		(3,126,469)		623,765		1,911,865		10,693,999		(4,139,122)		(3,522,114)		_
Changes of assumptions		-		1,540,627		-		-		9,274,363		-		-		(364,277)
Benefit payments		(6,871,757)		(6,228,924)		(6,047,218)		(6,023,853)		(5,141,978)		(4,585,258)		(2,496,511)		(1,767,304)
Net change in Total Pension Liability		11,743,569		10,378,499		11,508,719		11,650,458		28,716,821		4,650,173		7,889,315		10,758,320
Total pension liability - beginning		187,811,743		177,433,244		165,924,525		154,274,067		125,557,246		120,907,073		113,017,758		102,259,438
Total pension liability - ending	\$	199,555,312	\$	187,811,743	\$	177,433,244	\$	165,924,525	\$	154,274,067	\$	125,557,246	\$	120,907,073	\$	113,017,758
Plan Fiduciary Net Position																
Employer contributions	\$	5,240,772	\$	4,877,630	\$	3,566,922	\$	2,797,003	\$	2,980,219	\$	4,004,656	\$	3,432,359	\$	3,330,889
Employee contributions		2,324,096		2,345,831		2,130,140		1,994,057		2,059,884		2,034,676		1,731,585		2,033,664
Net investment income		41,840,071		5,641,739		9,159,909		10,298,412		13,694,012		58,578		2,655,869		14,124,238
Benefit payments		(6,871,757)		(6,228,924)		(6,047,218)		(6,023,853)		(5,141,978)		(4,585,258)		(2,496,511)		(1,767,304)
Administrative expenses		(153,233)		(158,004)		(139,604)		(136,371)		(125,445)		(102,053)		(99,782)		(83,318)
Other		16,093	_	24,956	_	1,254	_	16,057	_	5,390	_	390		3,694	_	5,421
Net change in fiduciary net position	\$	42,396,042	\$	6,503,228	\$	8,671,403	\$	8,945,305	\$	13,472,082	\$	1,410,989	\$	5,227,214	\$	17,643,590
Plan Fiduciary net position - beginning	\$	153,908,600	\$	147,405,372	\$	138,733,969	\$	129,788,664	\$	116,316,582	\$	114,905,593	\$	109,678,379	\$	92,034,791
Plan Fiduciary net position - ending	\$	196,304,642	\$	153,908,600	\$	147,405,372	\$	138,733,969	\$	129,788,664	\$	116,316,582	\$	114,905,593	\$	109,678,381
Net Pension Liability	\$	3,250,670	\$	33,903,143	\$	30,027,872	\$	27,190,556	\$	24,485,403	\$	9,240,664	\$	6,001,480	\$	3,339,377
Plan Fiduciary Net Position as a percentage of the total pension liability Covered payroll	\$	98.4% 26,438,215	¢	81.9% 26,418,793	¢	83.1% 24,216,376	•	83.6% 22,589,818	¢	84.1% 22,727,638	¢	92.6% 20,984,917	¢	95.0% 19,700,678	¢	97.0% 23,051,144
Net pension liability as a percentage of covered payroll	Þ	12.3%	Ф	128.3%	Þ	124.0%	Þ	120.4%	Ф	107.7%	Φ	20,984,917	Ф	30.5%	Ф	14.5%

See notes to required supplementary information.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability (Asset)

Judicial Retirement Benefits Trust Plan

	2021	2020	2019	2018	2017		2016		2015		2014
Total Pension Liability											
Service Cost	\$ 3,387,061	\$ 3,335,150	\$ 3,184,130	\$ 3,214,534	\$ 3,000,728	\$	2,858,682	\$	3,024,124	\$	3,001,985
Interest	6,213,441	5,662,868	5,526,089	5,302,975	5,031,124		4,743,701		4,540,604		4,133,613
Benefit Changes	-	-	-	-	-		-		252,965		-
Differences between expected and actual experience	(563,923)	180,125	(3,165,269)	(2,032,334)	(1,788,628)		(1,205,744)		(2,857,295)		-
Changes of assumptions	· - ′	2,514,949	-	-	5,173,300				-		(671,723)
Benefit payments	(3,983,312)	(3,724,119)	(3,608,845)	(2,956,407)	(2,740,166)		(2,530,567)		(1,808,864)		(1,631,368)
Net change in Total Pension Liability	5,053,267	7,968,973	1,936,105	3,528,768	8,676,358		3,866,072		3,151,534		4,832,507
Total pension liability - beginning	89,061,571	81,092,598	79,156,493	75,627,725	66,951,367		63,085,295		59,933,761		55,101,254
Total pension liability - ending	\$ 94,114,838	\$ 89,061,571	\$ 81,092,598	\$ 79,156,493	\$ 75,627,725	\$	66,951,367	\$	63,085,295	\$	59,933,761
Plan Fiduciary Net Position	2 245 922	2 100 255	1 022 022	2.057.520	2.057.150	¢.	2.410.020	¢	2 700 207	¢.	2.542.510
Employer contributions	2,245,823	2,189,255	1,922,023	2,057,529	2,057,159	\$	2,410,039	\$	2,709,397	\$	2,543,510
Employee contributions Net investment income	1,215,454 21,815,087	1,204,448 2,955,375	1,109,161 4,819,916	1,142,163 5,376,764	1,117,518 7,107,208		1,052,902 28,787		1,120,609 1,367,527		1,092,790 7,220,592
Benefit payments	(3,983,312)	(3,724,119)	(3,608,845)	(2,956,407)	(2,740,166)		(2,530,567)		(1,808,864)		(1,631,368)
Administrative expenses	(79,690)	(79,652)	(73,533)	(71,270)	(65,088)		(52,548)		(51,039)		(42,538)
Other	(2)	(79,032)	(73,333)	(71,270)	(1)		(1)		(31,039)		(42,336)
Net change in fiduciary net position	\$ 21,213,360	\$ 2,545,307	\$ 4,168,722	\$ 5,548,779	\$ 7,476,630	\$	908,612	\$	3,337,630	\$	9,182,986
Plan Fiduciary net position - beginning	\$ 80,157,923	\$ 77,612,616	\$ 73,443,894	\$ 67,895,115	\$ 60,418,485	\$	59,509,873	\$	56,172,243	\$	46,989,257
Plan Fiduciary net position - ending	\$ 101,371,283	\$ 80,157,923	\$ 77,612,616	\$ 73,443,894	\$ 67,895,115	\$	60,418,485	\$	59,509,873	\$	56,172,243
Net Pension Liability (Asset)	\$ (7,256,445)	\$ 8,903,648	\$ 3,479,982	\$ 5,712,599	\$ 7,732,610	\$	6,532,882	\$	3,575,422	\$	3,761,518
Plan Fiduciary Net Position as a percentage of the total pension liability Covered payroll Net pension liability as a percentage of	\$ 107.7% 10,386,572	\$ 90.0% 10,284,151	\$ 95.7% 9,473,758	\$ 92.8% 9,653,254	\$ 89.8% 9,532,174	\$	90.2% 8,981,094	\$	94.3% 9,570,014	\$	93.7% 9,314,258
covered payroll	-69.9%	86.6%	36.7%	59.2%	81.1%		72.7%		37.4%		40.4%

See notes to required supplementary information.

Schedules of Changes in the Participating Employers' Net Pension Liability Rhode Island Judicial Retirement Fund Trust Plan

	2021	2020	2019	2018	2017	2016	2015	2014
	2021	2020	4 01 <i>7</i>	2010	2017	2010	2013	2014
Total Pension Liability								
Service Cost	\$ 399,962	\$ 322,719	\$ 277,053	\$ 293,825	\$ 349,593	\$ 466,046	\$ 416,208	\$ 497,532
Interest	550,105	639,648	756,058	725,852	615,782	719,311	673,131	709,876
Benefit Changes	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(656,413)	(646,063)	(2,023,652)	-	(1,090,142)	_	(642,370)	1,617,560
Changes of assumptions	1,175,829	2,059,715	917,164	(115,788)	(665,634)	1,865,123	858,970	(1,159,812)
Benefit payments	(395,828)	(399,016)	(399,016)	(399,016)	(399,015)	(231,176)	-	-
Net change in Total Pension Liability	1,073,655	1,977,003	(472,393)	504,873	(1,189,416)	2,819,304	1,305,939	1,665,156
Total pension liability - beginning	 22,451,179	20,474,176	20,946,569	20,441,696	21,631,112	18,811,808	17,505,869	15,840,713
Total pension liability - ending	\$ 23,524,834	\$ 22,451,179	\$ 20,474,176	\$ 20,946,569	\$ 20,441,696	\$ 21,631,112	\$ 18,811,808	\$ 17,505,869
Plan Fiduciary Net Position								
Employer contributions	\$ 399,138	\$ 399,016	\$ 399,016	\$ 399,012	\$ 332,340	\$ 140,141	\$ -	\$ _
Employee contributions	126,171	125,540	121,904	116,757	116,667	135,454	158,718	153,145
Net investment income	177,802	22,391	39,005	43,511	63,669	3,869	9,094	12,045
Benefit payments	(395,828)	(399,016)	(399,016)	(399,016)	(399,015)	(231,176)	-	-
Administrative expenses	(988)	(959)	(762)	(646)	(558)	(361)	(239)	(77)
Other	-	-	-	-	-	1	-	
Net change in fiduciary net position	\$ 306,295	\$ 146,972	\$ 160,147	\$ 159,618	\$ 113,103	\$ 47,928	\$ 167,573	\$ 165,113
Plan Fiduciary net position - beginning	\$ 1,113,365	\$ 966,393	\$ 806,246	\$ 646,628	\$ 533,525	\$ 485,597	\$ 318,024	\$ 152,910
Plan Fiduciary net position - ending	\$ 1,419,660	\$ 1,113,365	\$ 966,393	\$ 806,246	\$ 646,628	\$ 533,525	\$ 485,597	\$ 318,023
Net Pension Liability	\$ 22,105,174	\$ 21,337,814	\$ 19,507,783	\$ 20,140,323	\$ 19,795,068	\$ 21,097,587	\$ 18,326,211	\$ 17,187,846
Plan Fiduciary Net Position as a percentage of the total pension liability	6.0%	5.0%	4.7%	3.8%	3.2%	2.5%	2.6%	1.8%
Covered payroll	\$ 1,051,425	\$ 1,046,167	\$ 1,002,164	\$ 1,020,224	\$ 988,110	\$ 963,703	\$ 1,320,875	\$ 1,276,208
Net pension liability as a percentage of covered payroll	2102.4%	2039.6%	1946.6%	1974.1%	2003.3%	2189.2%	1387.4%	1346.8%

See notes to required supplementary information.

Schedules of Changes in the Participating Employers' Net Pension Liability Rhode Island State Police Retirement Fund Trust Plan

	2021		2020		2019		2018	2017
Total Pension Liability								
Service Cost	\$	-	\$	-	\$	-	\$ -	\$ -
Interest		11,468,916		11,878,027		11,339,743	11,712,422	12,588,781
Benefit Changes		-		-		-	-	-
Differences between expected and actual experience		1,256,209		(161,705)		13,040,378	-	-
Changes of assumptions		-		(1,135,641)		-	-	4,213,754
Benefit payments		(16,268,950)		(16,581,299)		(16,799,403)	(17,273,412)	(17,391,853)
Net change in Total Pension Liability		(3,543,825)		(6,000,618)		7,580,718	(5,560,990)	(589,318)
Total pension liability - beginning		171,976,129		177,976,747		170,396,029	175,957,019	176,546,337
Total pension liability - ending	\$	168,432,304	\$	171,976,129	\$	177,976,747	\$ 170,396,029	\$ 175,957,019
Plan Fiduciary Net Position								
Employer contributions		16,387,092		16,387,092		16,387,092	16,387,092	31,566,076
Employee contributions		-		-		-	-	-
Net investment income		6,144,151		868,442		768,972	1,136,938	1,838,792
Benefit payments		(16,268,950)		(16,581,299)		(16,799,403)	(17,273,412)	(17,391,853)
Administrative expenses		(18,194)		(17,175)		(16,727)	(5,304)	-
Other		-		-		75	1	-
Net change in fiduciary net position	\$	6,244,099	\$	657,060	\$	340,009	\$ 245,315	\$ 16,013,015
Plan Fiduciary net position - beginning		17,255,399		16,598,339		16,258,330	16,013,015	-
Plan Fiduciary net position - ending	\$	23,499,498	\$	17,255,399	\$	16,598,339	\$ 16,258,330	\$ 16,013,015
Net Pension Liability	\$	144,932,806	\$	154,720,730	\$	161,378,408	\$ 154,137,699	\$ 159,944,004
Plan Fiduciary Net Position as a percentage of the total pension liability Covered payroll		14.0%		10.0%		9.3%	9.5%	9.1%
Net pension liability as a percentage of covered payroll		-		-		-	-	

See notes to required supplementary information.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability (Asset)

Municipal Employees' Retirement System Plan

	2	021	20	20	2019	20)18
	General employees	Police & Fire	General employees	Police & Fire	General employees Police & Fi	General ee employees	Police & Fire
Total Pension Liability							
Service Cost	\$ 21,116,570	\$ 24,570,482	\$ 22,054,540	\$ 24,666,454	\$ 22,389,001 \$ 22,704,	44 \$ 22,575,669	\$ 21,676,077
Interest	89,241,369	58,271,187	88,753,861	52,729,964	86,978,973 50,426,		47,530,413
Benefit Changes	-	1,336,024	-	41,705,800	-	-	-
Differences between expected and actual experience	(10,036,118)		(11,977,530)		(8,058,640) (10,798,	02) (2,694,614)	(557,654)
Changes of assumptions	(10,030,110)	(3,713,033)	(13,447,289)		(0,030,040) (10,730,	(2,0)4,014)	(337,034)
Benefit payments	(78,841,750)	(34,606,423)		(32,032,192)	(74,514,466) (28,785,	59) (71,940,154)	(26,791,879)
Net change in Total Pension Liability	21,480,071	43,856,215	8,324,940	80,495,438	26,794,868 33,547,	14 32,725,708	41,856,957
Total pension liability - beginning	1,303,739,292	837,463,506	1,295,414,352	756,968,068	1,268,619,484 723,420,	54 1,235,893,776	681,563,797
Total pension liability - ending	\$ 1,325,219,363	\$ 881,319,721	\$ 1,303,739,292	\$ 837,463,506	\$ 1,295,414,352 \$ 756,968,	68 \$ 1,268,619,484	\$ 723,420,754
Plan Fiduciary Net Position							
Employer contributions	\$ 32,485,480	\$ 27,918,657	\$ 32,776,043	\$ 23,700,625	\$ 31,732,424 \$ 19,121,	64 \$ 30,183,815	\$ 16,819,840
New employer contributions		\$ 1,232,204	-	\$ 12,757,430	-	-	-
Employee contributions	6,638,918	12,856,342	6,914,175	11,818,199	7,076,833 10,965,	45 7,208,167	10,500,868
Net investment income	275,237,166	174,540,728	37,864,100	22,883,816	64,456,994 36,572,·	20 75,536,071	41,229,835
Benefit payments	(78,841,750)	(34,606,423)	(77,058,642)	(32,032,192)	(74,514,466) (28,785,	59) (71,940,154)	(26,791,879)
Transfers of member contributions							
Administrative expenses	(1,047,735)	` ' '					` ' '
Transfers to affiliated systems	8,129	(179,149)		(37,714)			` ' '
Other	7,523	998	3,490	268	· · · · · · · · · · · · · · · · · · ·	65 (7,392)	
Net change in fiduciary net position	\$ 234,487,731	\$ 181,097,352	\$ 367,827	\$ 38,457,425	\$ 27,317,620 \$ 37,365,	10 \$ 39,415,141	\$ 40,748,563
Plan Fiduciary net position - beginning	\$ 1,037,147,653		\$ 1,036,779,826	\$ 588,360,443	\$ 1,009,462,206 \$ 550,994,		\$ 510,245,970
Plan Fiduciary net position - ending	\$ 1,271,635,384	\$ 807,915,220	\$ 1,037,147,653	\$ 626,817,868	\$ 1,036,779,826 \$ 588,360,	43 \$ 1,009,462,206	\$ 550,994,533
Net Pension Liability (Asset)	\$ 53,583,979	\$ 73,404,501	\$ 266,591,639	\$ 210,645,638	\$ 258,634,526 \$ 168,607,	25 \$ 259,157,278	\$ 172,426,221
Plan Fiduciary Net Position as a percentage of the total pension liability	96.0%	91.7%	79.6%	74.8%	80.0%	7% 79.6%	76.2%
Covered payroll	\$ 258,452,389	\$ 128,359,989			\$ 255,923,274 \$ 111,169,9		
Net pension liability (asset) as a percentage of covered payroll	20.7%	57.2%	102.0%	177.1%	101.1% 151	7% 103.8%	162.9%

See notes to required supplementary information.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability (Asset)

Municipal Employees' Retirement System Plan

	2017				20:	16		2015				2014				
	Gen emple		P	olice & Fire		General employees	P	olice & Fire		General employees	Po	olice & Fire		General employees	P	olice & Fire
Total Pension Liability																
Service Cost	\$ 21.	557,479	\$	18,945,916	\$	20,993,576	\$	17,716,756	\$	20,454,038	\$	15,802,260	\$	20,534,252	\$	15,425,188
Interest		854,464	Ψ	44,876,752	Ψ	82,527,045	Ψ	42,922,588	Ψ	79,553,219	Ψ	39,209,010	Ψ	77,208,696	Ψ	36,969,722
Benefit Changes	05,	-		-		-		-		18,678,454		20,243,581		-		-
Differences between expected and actual experience	(1	116,817)		6,573,580		(14,594,497)		(9,510,635)		(10,829,976)		(2,598,079)		_		
Changes of assumptions	. ,	394,231		35,347,395		(14,394,497)		(9,510,035)		(10,829,970)		(2,396,079)		893,569		(4,665,819)
Benefit payments		152,762)		(26,127,177)		(70,865,501)		(25,248,345)		(66,083,440)		(22,950,990)		(66,801,709)		(22,501,480)
Net change in Total Pension Liability		536,595		79,616,466		18,060,623		25,880,364		41,772,295		49,705,782		31,834,808		25,227,611
Total pension liability - beginning		357,181		601,947,331		1,125,296,558		576,066,967	1	1,083,524,263		526,361,185	1	,051,689,455		501,133,574
Total pension liability - ending	\$ 1,235,		\$	681,563,797			\$	601,947,331			\$	576,066,967			\$	526,361,185
Plan Fiduciary Net Position Employer contributions New employer contributions	\$ 31,	686,825	\$	16,855,985	\$	30,300,536	\$	16,296,479	\$	28,763,340	\$	15,588,547	\$	26,704,092	\$	11,193,028
Employee contributions	7,	332,568		10,079,595		7,244,745		9,561,530		4,368,524		7,223,947		4,333,503		6,979,451
Net investment income	103,	015,529		54,186,494		24,225		(156,872)		21,923,799		10,703,150		126,156,827		59,474,454
Benefit payments	(72,	152,762)		(26,127,177)		(70,865,501)		(25,248,345)		(66,083,440)		(22,950,990)		(66,801,709)		(22,501,480)
Transfers of member contributions		-		-		-		-		-		-		(85,962)		73,422
Administrative expenses	(973,249)		(511,933)		(1,178,758)		(427,823)		(878,056)		(425,478)		(789,990)		(372,429)
Transfers to affiliated systems	(272,164)		(798,852)		312,940		(312,936)		(48,286)		10,774		-		-
Other		26,504		69,347		34,888		66,307		262,213		21,917		62,117		23,960
Net change in fiduciary net position	\$ 68,	663,251	\$	53,753,459	\$	(34,126,925)	\$	(221,660)	\$	(11,691,906)	\$	10,171,867	\$	89,578,878	\$	54,870,406
Plan Fiduciary net position - beginning	\$ 901,	383,814	\$	456,492,511	\$	935,510,739	\$	456,714,171	\$	947,202,645	\$	446,542,304	\$	857,623,766	\$	391,671,897
Plan Fiduciary net position - ending	\$ 970,	047,065	\$	510,245,970	\$	901,383,814	\$	456,492,511	\$	935,510,739	\$	456,714,171	\$	947,202,644	\$	446,542,303
Net Pension Liability (Asset)	\$ 265,	846,711	\$	171,317,827	\$	241,973,367	\$	145,454,820	\$	189,785,819	\$	119,352,796	\$	136,321,619	\$	79,818,882
Plan Fiduciary Net Position as a percentage of the total pension liability Covered payroll Net pension liability (asset) as a percentage of covered payroll	\$ 244,	78.5% 466,993 108.7%	\$	74.9% 102,020,230 167.9%	\$	78.8% 233,474,157 103.6%	\$	75.8% 96,737,235 150.4%	\$	83.1% 228,189,238 83.2%	\$	79.3% 91,293,039 130.7%	\$	87.4% 223,124,242 61.1%	\$	84.8% 88,783,926 89.9%
covered payron		100.7/0		107.770		103.070		150.470		03.270		130.770		01.1/0		07.7/0

See notes to required supplementary information.

Schedules of Investment Returns

Annual Money-Weighted Rate of Return, Net of Investment Expense

	ERS	TSB	MERS	SPRBT	JRBT	RIJRFT	SPRFT
Fiscal Year Ended June 30, 2021	27.67%	27.21%	27.56%	27.08%	27.15%	15.33%	29.73%
Fiscal Year Ended June 30, 2020	3.82%	3.64%	4.67%	3.85%	3.84%	2.29%	3.89%
Fiscal Year Ended June 30, 2019	6.54%	6.54%	6.56%	6.62%	6.60%	4.72%	8.91%
Fiscal Year Ended June 30, 2018	7.85%	7.85%	7.87%	7.83%	7.76%	6.45%	6.91%
Fiscal Year Ended June 30, 2017	12.34%	11.66%	12.17%	11.87%	11.87%	11.46%	9.79%
Fiscal Year Ended June 30, 2016	-0.78%	-0.15%	-0.57%	-0.07%	-0.03%	-1.72%	-
Fiscal Year Ended June 30, 2015	2.06%	2.25%	2.22%	2.28%	2.27%	2.28%	-
Fiscal Year Ended June 30, 2014	15.32%	15.25%	15.12%	14.99%	14.99%	5.61%	-

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

The SPRFT trust plan was created in fiscal 2017.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Employees' Retirement System Plan

Plan	Actuarially Determined Contribution		Contributions in Relation to Actuarially Determined Contribution		Contribution Deficiency (Excess)		Covered Payroll	Contributions as a % of Covered Payroll
State employees								
2021	\$	204,285,120	\$	204,285,120		\$ -	\$ 739,998,727	27.61%
2020		199,918,013		199,918,013		-	755,310,749	26.47%
2019		189,415,698		189,415,698		-	718,732,131	26.35%
2018		174,374,155		174,374,155		-	691,006,031	25.23%
2017		176,093,310		176,093,310		-	683,530,388	25.76%
2016		159,534,421		159,534,421		-	671,420,995	23.76%
2015		155,901,921		155,901,921		-	669,787,489	23.28%
2014		151,077,142		151,077,142		-	653,573,357	23.12%
Teachers								
2021	\$	276,568,795	\$	276,568,795	*	\$ -	\$ 1,091,442,659	25.34%
2020		266,845,321		266,845,321	*	-	1,080,912,926	24.69%
2019		249,634,988		249,634,988	*	-	1,060,472,523	23.54%
2018		239,092,095		239,092,095	*	-	1,031,394,874	23.18%
2017		233,828,517		233,828,517	*	-	1,010,449,004	23.14%
2016		225,569,556		225,569,556	*	-	980,562,840	23.00%
2015		217,902,736		217,902,736	*	-	966,985,115	22.53%
2014		197,869,704		197,869,704	*	-	951,322,312	20.80%

See notes to required supplementary information.

^{*} includes contributions by the State of Rhode Island as the nonemployer contributing entity.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Teachers' Survivors Benefits Plan

Plan	Dete	narially rmined ribution	Contributions in Relation to Actuarially Determined Contribution		D	ntribution eficiency Excess)	Covered Payroll	Contributions as a % of Covered Payroll
2021	\$	_	\$	736,193	\$	(736,193) \$	603,150,124	0.12%
2020	Ψ	_	Ψ	745,760	Ψ	(745,760) \$, ,	0.13%
2019		-		745,856		(745,856)	576,424,716	0.13%
2018		-		744,035		(744,035)	557,928,457	0.13%
2017		-		589,883		(589,883)	538,657,952	0.11%
2016		-		642,276		(642,276)	581,414,779	0.11%
2015		-		603,388		(603,388)	561,753,409	0.11%
2014		-		609,618		(609,618)	563,134,080	0.11%

See notes to required supplementary information.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

State Police Retirement Benefits Trust Plan

Plan	De	ctuarially etermined ntribution	Contributions in Relation to Actuarially Determined Contribution		Contribution Deficiency (Excess)		Covered Payroll		Contributions as a % of Covered Payroll
2021	ф	5.040.550	Φ.	5.040.550	Φ.		Φ.	24 420 21 7	10.000/
2021	\$	5,240,772	\$	5,240,772	\$	-	\$	26,438,215	19.82%
2020		4,877,630		4,877,630		-		26,418,793	18.46%
2019		3,566,922		3,566,922		-		24,216,376	14.73%
2018		2,797,003		2,797,003		-		22,589,818	12.38%
2017		2,980,219		2,980,219		-		22,727,638	13.11%
2016		4,004,656		4,004,656		-		20,984,917	19.08%
2015		3,432,359		3,432,359		-		19,700,678	17.42%
2014		3,330,889		3,330,889		-		23,051,144	14.45%

See notes to required supplementary information.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Judicial Retirement Benefits Trust Plan

Plan	De	ctuarially etermined ntribution	in l Ac	ntributions Relation to ctuarially etermined intribution	De	tribution ficiency Excess)	Covered Payroll	Contributions as a % of Covered Payroll
2021	\$	2,245,823	\$	2,245,823	\$	-	\$ 10,386,572	21.62%
2020		2,189,255		2,189,255		-	10,284,151	21.29%
2019		1,922,023		1,922,023		-	9,473,758	20.29%
2018		2,057,529		2,057,529		-	9,653,254	21.31%
2017		2,057,159		2,057,159		-	9,532,174	21.58%
2016		2,410,039		2,410,039		-	8,981,094	26.83%
2015		2,709,397		2,709,397		-	9,570,014	28.31%
2014		2,543,510		2,543,510		-	9,314,258	27.31%

See notes to required supplementary information.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Rhode Island Judicial Retirement Fund Trust Plan

Plan	D	ctuarially etermined ontribution	in i	ntributions Relation to ctuarially etermined ontribution	Contribution Deficiency (Excess)			Covered Payroll	Contributions as a % of Covered Payroll
2021	\$	1,242,086	\$	399,138	\$	842,948	\$	1,051,425	37.96%
2020		1,215,152		399,016		816,136		1,046,167	38.14%
2019		1,223,581		399,016		824,565		1,002,164	39.82%
2018		1,322,172		399,012		923,160		1,020,224	39.11%
2017		1,240,501		332,340		908,161		988,161	33.63%
2016		1,200,000		140,141		1,059,859		963,703	14.54%
2015		1,623,061		-		1,623,061		1,320,875	0.00%
2014		1,695,434		-		1,695,434		1,276,208	0.00%

See notes to required supplementary information.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Rhode Island State Police Retirement Fund Trust Plan

Plan	in Relation t Actuarially Actuarially Determined Determined		Contributions in Relation to Actuarially Determined Contribution	D	ntribution eficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll	
2021	\$	16,387,092	\$	16,387,092	\$	<u>-</u>	n/a	n/a
2020		16,387,092		16,387,092	·	-	n/a	n/a
2019		16,387,092		16,387,092		-	n/a	n/a
2018		16,387,092		16,387,092		-	n/a	n/a
2017		16,387,092		16,566,076		(178,984)	n/a	n/a

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

The SPRFT trust plan was created in fiscal 2017.

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Municipal Employees' Retirement System Plan

Plan	Actuarially Determined Contribution		Contributions in Relation to Actuarially Determined Contribution		Contribution Deficiency (Excess)		Covered Payroll	Contributions as a % of Covered Payroll
General Employees								
2021	\$	32,485,480	\$	32,485,480	\$	-	\$ 258,452,389	12.57%
2020		32,776,043		32,776,043		-	261,462,549	12.54%
2019		31,732,424		31,732,424		-	255,923,274	12.40%
2018		30,183,815		30,183,815		-	249,731,376	12.09%
2017		31,686,825		31,686,825		-	244,466,993	12.96%
2016		30,300,536		30,300,536		-	233,474,157	12.98%
2015		28,763,340		28,763,340		-	228,189,238	12.61%
2014		26,704,094		26,704,094		-	223,124,242	11.76%
Police and Fire								
2021	\$	27,918,657	\$	27,918,657	\$	-	\$ 128,359,989	21.75%
2020		23,700,625		23,700,625		-	118,932,888	19.93%
2019		19,121,064		19,121,064		-	111,169,948	17.20%
2018		16,819,840		16,819,840		-	105,827,416	15.89%
2017		16,855,985		16,855,985		-	102,020,230	16.52%
2016		16,296,479		16,296,479		-	96,737,235	16.85%
2015		15,588,547		15,588,547		-	91,293,039	17.08%
2014		11,193,028		11,193,028		-	88,783,926	12.89%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

Notes to Required Supplementary Information - Fiscal Year Ended June 30, 2021

The schedules are intended to present ten years of data. Additional years of data will be presented as they become available.

1. Actuarial methods and assumptions used to calculate the net pension liability (asset) of the participating employers

The actuarial methods and assumptions used to calculate the net pension liability (asset) of the participating employers are described in Note 8 to the financial statements. The following information is presented about factors that significantly affect trends in the amounts reported between years.

June 30, 2021 measurement date -

There were no changes in actuarial methods or assumptions reflected in the calculation of the net pension liability (asset) of the plans as of the June 30, 2021 measurement date compared to the June 30, 2020 measurement date except for the changes in assumptions for the RIJRFT plan due to use of the municipal bond index rate of 1.92% instead of the plan's assumed investment rate of return of 2.45%.

June 30, 2020 measurement date -

As part of the 2020 Actuarial Experience Study for the six-year period ending June 30, 2019 as approved by the System Board on May 22, 2020, certain assumptions were modified and reflected in the determination of net pension liability (asset) at the June 30, 2020 measurement date. The following summarizes the more significant changes in assumptions:

- Separated Correctional Officers from State Employees for all assumptions.
- Updated the underlying mortality tables from the RP-2014 set of tables to the public sector-based PUB (10) tables.
- Increased slightly the probabilities of turnover.
- Decreased slightly the probabilities of retirement.
- Modified slightly the probabilities of disability, including adding material incidence of disability
 for members in the age ranges that historically have been eligible to retire but under prospective
 provisions are not.
- Lowered wage assumptions for Judges from 3.00% to 2.75%.

The RIJRFT plan used the municipal bond index rate of 2.45% instead of the plan's assumed investment rate of return of 3.13%.

June 30, 2019 measurement date -

There were no changes in actuarial methods or assumptions reflected in the calculation of the net pension liability (asset) of the plans as of the June 30, 2019 measurement date compared to the June 30, 2018 measurement date except for the changes in assumptions for the RIJRFT plan due to use of the municipal bond index rate of 3.13% instead of the plan's assumed investment rate of return of 3.62%.

June 30, 2018 measurement date –

There were no changes in actuarial methods or assumptions reflected in the calculation of the net pension liability (asset) of the plans as of the June 30, 2018 measurement date compared to the June 30, 2017 measurement date except for the changes in assumptions for the RIJRFT plan due to use of the municipal bond index rate of 3.62% instead of the plan's assumed investment rate of return of 3.56%.

Notes to Required Supplementary Information - Fiscal Year Ended June 30, 2021

1. Actuarial methods and assumptions used to calculate the net pension liability (asset) of the participating employers (continued)

June 30, 2017 measurement date -

As part of the 2017 Actuarial Experience Investigation Study for the six-year period ending June 30, 2016 as approved by the System Board on May 15, 2017, certain assumptions were modified and reflected in the determination of the net pension liability (asset) at the June 30, 2017 measurement date. The following summarizes the more significant changes in assumptions:

- Decreased the general inflation assumption from 2.75% to 2.50%;
- Decreased the nominal investment return assumption from 7.50% to 7.00%;
- Decreased the general wage growth assumption from 3.25% to 3.00%;
- Decreased salary increase assumptions; and
- Updated the post-retirement mortality tables to variants of the RP-2014 table. For the improvement scale, update to the ultimate rates of the MP-2016 projection scale.

Additionally, the municipal bond index rate, based on fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" (3.56% at June 30, 2017) was applied to all periods of projected benefit payments to determine the total pension liability instead of the plan's assumed investment rate of return of 2.85%.

June 30, 2016 measurement date -

There were no changes in actuarial methods or assumptions reflected in the calculation of the net pension liability (asset) of the plans as of the June 30, 2016 measurement date compared to the June 30, 2015 measurement date except for the changes in assumptions for the RIJRFT plan due to use of the municipal bond index rate of 2.85% instead of the plan's assumed investment rate of return of 3.8%.

June 30, 2015 measurement date -

There were no changes in actuarial methods or assumptions reflected in the calculation of the net pension liability (asset) of the plans as of the June 30, 2015 measurement date compared to the June 30, 2014 measurement date except for the changes in assumptions for the RIJRFT plan due to use of the municipal bond index rate of 3.8% instead of the plan's assumed investment rate of return of 4.0%.

Benefit changes are reflected in the calculation of the net pension liability at the June 30, 2015 measurement date. The following is a summary of those benefit changes that resulted from the settlement of the pension litigation and the subsequent enactment of those settlement provisions by the General Assembly.

• Employees with more than 20 years of service at July 1, 2012 will increase their employee contribution rates to 11% for state employees and municipal general employees will contribute 8.25% (9.25% for units with a COLA provision) and participate solely in the defined benefit plan going forward – service credit accruals will increase from 1% to 2% per year.

Notes to Required Supplementary Information - Fiscal Year Ended June 30, 2021

1. Actuarial methods and assumptions used to calculate the net pension liability (asset) of the participating employers (continued)

- Members are eligible to retire upon the attainment of: age 65 with 30 years of service, 64 with 31 years of service, 63 with 32 years of service, or 62 with 33 years of service. Members may retire earlier if their RIRSA date is earlier or are eligible under a transition rule.
- MERS public safety employees may retire at age 50 with 25 years of service, or any age with 27 years of service. MERS public safety employees will contribute 9.00% (10.00% for units with a COLA provision)
- Employees with more than 10 but less than 20 years of service at July 1, 2012 will receive an increased employer contribution to the defined contribution plan. Also, members who earn less than \$35,000 per year will not be required to pay the administrative fees to the defined contribution plan.
- Members who retired from a COLA eligible plan before July 1, 2012 will receive a one-time cost of living adjustment of 2% of the first \$25,000 paid as soon as administratively possible.
- Retirees as of June 30, 2015 will receive two \$500 stipends; the interim cost of living increases will occur at 4 year rather than 5-year intervals.
- The COLA formula was adjusted to: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5yr Return 5.5%, with a max of 4%) and 50% calculated using previous year's CPI-U (max of 3%) for a total max COLA of 3.5%. This COLA is calculated on the first \$25,855, effective 01/01/16, and indexed as of that date as well. (The indexing formula is run annually regardless of funding level each year.)
- Minor adjustments were made to the actuarial reduction for employees choosing to retire early.

2. Actuarially determined contributions

Actuarially determined contributions are calculated as of June 30, three years prior to the fiscal year in which the contributions are reported. For example, the contribution rates for fiscal 2021 for the plans were based on valuations performed as of June 30, 2018.

Contributions for teachers within the ERS plan include \$112,622,731, \$108,635,976, \$102,238,747, \$98,120,835, \$96,542,150, \$87,997,637, \$84,943,801 and \$76,700,915 of nonemployer entity contributions made by the State of Rhode Island for fiscal years 2021, 2020, 2019, 2018, 2017, 2016, 2015, and 2014, respectively.

Contributions for the TSB plan are required by statute as outlined in the General Laws of Rhode Island. Due to the funded status of the plan, there was no actuarially determined contribution required to the plan in years 2014 through 2021.

Notes to Required Supplementary Information - Fiscal Year Ended June 30, 2021

2. Actuarially determined contributions (continued)

	ERS		MERS	SPRBT	JRBT	RIJRFT	SPRFT								
	State Employees	Teachers		18 for all plan											
Valuation Date															
Actuarial Cost Method	Entry Age Normal - the Individual Entry Age Actuarial Cost methodology is used.														
Amortization Method		Level Dollar	Level Dollar												
Equivalent Single Remaining Amortization Period	18 years	20 years	17 years	20 years	20 years	20 years	18 years								
Amortization period for new gain/loss base			20	years											
Asset Valuation Method			Market value	Market value											
Actuarial Assumptions:															
Investment Rate of Return	7.0%	7.0%	7.0%	7.0%	7.0%	2.45%	7.0%								
Projected Salary Increases	3.25% to 6.25%	3.0% to 13.0%	General Employees 3.25% to	3.75% to 11.75%	3.0%	3.0%	N/A								
	0.2078	15.0%	7.25% Police & Fire Employees 4.0% to	11,70,70											
Mortality	Scale Ultimate	loyees, RP-2014 Comb. MP16. nployees, RP-2014 Con Male and female teachers: RP- 2014 Combined Healthy for Males and Females, respectively, with White Collar adjustments, projected with Scale Ultimate MP 16.	•												
Inflation			2	2.5%			2.5%								

The required contribution for the State Police Retirement Fund Trust (SPRFT), a plan newly created in fiscal 2017 covering a closed group of retired individuals, was calculated based on a level-dollar amortization over 18 years from June 30, 2016.

Notes to Required Supplementary Information - Fiscal Year Ended June 30, 2021

2. Actuarially determined contributions (continued)

Cost of Living Adjustments

All future COLAs were assumed to be 2.1% per annum for all MERS units with the COLA provision. For the TSB plan, a 2.5% COLA was assumed. For all other plans, it was assumed that the COLA was suspended for nine years (as of the June 30, 2018 valuation) and 2.1% thereafter.

Supplemental contributions

Certain supplemental contributions required by the General Laws were made to the ERS plan as more fully explained in Note 7 (d) to the financial statements. The following table reconciles the ERS plan employer contributions in the Schedule of Changes in the Participating Employers' Net Pension Liability and amounts included in the financial statements for the ERS plan.

	State Employees			Teachers		Total ERS Plan
Employer Contributions included in the						
Schedules of Changes in the Participating						
Employers' Net Pension Liability	\$	204,285,120	\$	276,568,795	\$	480,853,915
Per ERSRI fiscal 2021 financial statements	Emp	loyer Contributi	ons		\$	368,034,575
	State Contributions for Teachers					112,622,731
	Supplemental Employer Contributions					196,609
	Total Employer Contributions				\$	480,853,915

3. Covered payroll

Covered payroll, as included in required supplementary information schedules, includes projected annualized payroll amounts for employees beginning employment during the fiscal year. Consequently, the covered payroll amounts included in the required supplementary information schedules may differ from the actual fiscal year payroll base to which the actuarially determined contribution rate was applied. Additionally, the contribution amount as a percentage of covered payroll may differ from the Board approved contribution rate expressed as a percentage of payroll.

4. Schedules of Investment Returns

The annual money-weighted returns on investments within each of the plans, net of investment expense, are shown in the required supplementary information schedule. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The schedules are intended to present ten years of data. Additional years of data will be presented as they become available.

Supplementary Information

Schedule of Investment Expenses

Schedule of Administrative Expenses

Schedule of Consultant Expenses

Schedule of Investment Expenses Fiscal Year Ended June 30, 2021

INVESTMENT MANAGEMENT FEES BY STRATEGY AND ASSET CLASS

TOTAL GROWTH		
Global Equity		
State Street Global Advisors - Russell 3000	\$ 243,205	
State Street Global Advisors - QVM Tilt	972,890	
State Street Global Advisors - MSCI EAFE -Commingled Fund	48,884	
State Street Global Advisors - MSCI CAD - Commingled Fund	7,842	
State Street Global Advisors - MSCI World ex US - Commingled Fund	125,813	
State Street Global Advisors - MSCI Emerging Markets - Commingled Fund	493,250	
Private Growth		
Private Equity	99,028,064	
Non-Core Real Estate	9,665,800	
Opportunistic Private Credit	6,033,415	\$ 116,619,163
INCOME		
Harvest - High Yield Infrastructure	523,527	
PIMCO - Liquid Credit	419,587	
Loomis	738,193	
Heitman	845,135	
Wellington	992,644	
Neuberger - Equity Options	658,399	
Private Credit	7,636,683	11,814,168
STABILITY		
Crisis Protection Class	162 101	
WAMCO - Treasury Long Duration	163,181	
Mackay Shields - Treasury Long Duration	96,148	
Systematic Trend Following (CPC LLC)	3,402,684	
Inflation Protection	2 421 (21	
Core Real Estate	3,421,621	
Private Infrastructure	10,411,395	
Brown Brothers Harriman - TIPS	79,300	
State Street Global Advisors - BBG Barclays - TIPS	21,650	
Volatility Protection	37,727	
Mackay Shields - Investment Grade Fixed Income Loomis	359,670	
Fidelity Corporate	383,270	
Absolute Return Hedge Funds	36,727,762	
Payden & Rygel	206,984	55,311,391
	·	
OTHER Duncall Overland		447,223
Russell Overlay Shott Capital/Hamilton Lane		
•		4,374 184,196,319
Subtotal - Investment Management Fees by Strategy and Asset Class		104,170,317
PROFESSIONAL FEES		
Legal	123,940	
BNY Mellon - Custodial	341,922	
Cliffwater	429,166	
NEPC	395,000	
Aberdeen	280,382	
Meketa	194,479	
Subtotal - Professional Fees		1,764,889
OPERATING EXPENSES		
Investment Administration - Office of the General Treasurer	\$ 1,758,233	
Other Expenses	83,837	
Subtotal - Operating Expenses		1,842,070
TOTAL INVESTMENT EXPENSES		\$ 187,803,278

Schedule of Administrative Expenses Fiscal Year Ended June 30, 2021

DEFINED BENEFIT PLANS

Personnel Expenses	
Salaries and wages	\$ 3,063,179
Benefits	 1,849,324
Total personnel expenses	 4,912,503
Purchased Services - Consultant Expenses	
Disability determination	353,178
Legal	301,894
Actuary	345,960
Information technology services	2,671,486
Stenographic services	3,443
Other professional services	 20,622
Total purchased services	 3,696,583
Operating Expenses	
Communications	141,922
Office and supplies	132,713
Printing and advertising	24,827
Travel	1,285
Occupancy	151,454
Insurance	76,891
Other	747
Total operating expenses	529,839
Subtotal administrative expenses - defined benefit plans	\$ 9,138,925
EFINED CONTRIBUTION PLANS	
Plan Administrative Expenses - TIAA-CREF	\$ 1,555,397
OTAL ADMINISTRATIVE EXPENSES ALL PLANS	\$ 10,694,322

Schedule of Consultant Expenses Fiscal Year Ended June 30, 2021

Disability Determination Services			
Medical exam fees - various physicians		\$	353,178
Legal			
Adler Pollock & Sheehan P.C.	\$ 15,208		
Hinckley, Allen, & Snyder LLP	2,010		
Savage Law Partners LLP	280,860		
Hearing officers - various	3,816	_	301,894
Actuary			
Gabriel Roeder Smith & Co.			345,960
Information Technology			
Guidesoft Inc.	255,698		
Lifeworks LTD.*	2,360,843		
Stonewall Solutions, Inc.	54,945	_	2,671,486
Stenographic Services			
Allied Court Reporters Inc.			3,443
Other Professional Services			
ACOM Solutions Inc.	1,176		
Bulletproof Solutions Inc.	4,320		
Pension Benefit Information	14,231		
Robinson Time Service & Sales Co.	189		
Techsmith Corp.	21		
Translator services	685		20,622
Total purchased services - consultant expenses		\$	3,696,583

^{*} Amount for this vendor reflected as expense during fiscal year - see note 3 to the financial statements.

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

JOINT COMMITTEE ON LEGISLATIVE SERVICES, GENERAL ASSEMBLY STATE OF RHODE ISLAND:

RETIREMENT BOARD OF THE EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the plans within the Employees' Retirement System of Rhode Island (System) as of and for the year ended June 30, 2021 and the related notes to the financial statements, which collectively comprise the System's basic financial statements, and have issued our report thereon dated December 22, 2021.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Joint Committee on Legislative Services, General Assembly Retirement Board of the Employees' Retirement System of the State of Rhode Island

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Dennis E. Hoyle, CPA Auditor General

December 22, 2021