

Financial Statements and Supplementary Schedules

June 30, 2021

(With Independent Auditors' Report Thereon)

Financial Statements and Supplementary Schedules
June 30, 2021

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Independent Auditors' Report

The Treasurer State of New Jersey:

We have audited the accompanying financial statements of the fiduciary activities of the State of New Jersey, Division of Pensions and Benefits (the Division), as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the Division'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 U.S. generally accepted accounting principles; 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.

Auditors' Responsibility

Our responsibility is to express an opinion 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from 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 auditors' 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 opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the fiduciary activities of the State of New Jersey, Division of Pensions and Benefits, as of June 30, 2021, and the respective changes in financial position for the year then ended in accordance with U.S. generally accepted accounting principles.



Emphasis of Matter

Reporting Entity

As discussed in note 2(a) to the financial statements, the financial statements referred to above are intended to present the financial position and the changes in financial position of the fiduciary funds administered by the Division. As a result, these financial statements do not purport to, and do not, present fairly the financial position of the State of New Jersey as of June 30, 2021 and the changes in its financial position, or, where applicable, its cash flows thereof for the year then ended in conformity with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Adoption of New Accounting Pronouncement

As discussed in footnote 2(k) to the basic financial statements, the Division adopted Government Accounting Standards Board (GASB) Statement No. 84 *Fiduciary Activities*. Our opinions are not modified with respect to this matter.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and the schedules included under Required Supplementary Information in the accompanying table of contents 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.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Division's basic financial statements. The schedules included under Supplementary Information in the accompanying table of contents (the Schedules) are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedules 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 are fairly stated, in all material respects, in relation to the basic financial statements as a whole.



Short Hills, New Jersey May 20, 2022

Management's Discussion and Analysis
(Unaudited)
June 30, 2021

Our discussion and analysis of the financial performance of the fiduciary funds (the Funds) administered by the Division of Pensions & Benefits (the Division) provides an overview of the Funds' financial activities for the State fiscal year ended June 30, 2021. Please read it in conjunction with the basic financial statements which follow this discussion.

Financial Highlights

Fiduciary Funds - Pension Trust Funds and Other Postemployment Benefit (OPEB) Plan

- Fiduciary net position increased by \$19.3 billion as a result of this year's operations from \$84.9 billion to \$104.2 billion.
- Additions for the year are \$32.5 billion, which are comprised of member, employer, nonemployer, and employer specific and other pension contributions (including transfer) of \$10.2 billion and net investment income of \$22.3 billion.
- Deductions for the year are \$13.1 billion, which are comprised of benefits, refund payments, and transfers of \$13.1 billion and administrative expenses of \$54.1 million.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the basic financial statements. The basic financial statements are comprised of two components: 1) fiduciary fund financial statements and 2) notes to the financial statements. This report also contains required and other supplementary information in addition to the basic financial statements.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The Division uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

Fiduciary Funds

Fiduciary funds are used to account for the assets that the Division holds on behalf of others as their agent. The Division administers twelve fiduciary funds: ten pension trust funds, one OPEB plan (OPEB-Retiree Local), and one custodial fund (Dental-Local).

As described in note 2(k), based on Governmental Accounting Standards Board (GASB) Statement No. 84, Fiduciary Activities (GASB 84), effective fiscal year 2021, the Division reevaluated the previous agency funds included in previously issued financial statements; determined that certain plans/programs are not administered through a trust and do not meet the equivalent arrangement criteria as defined in GASB 84 and, therefore, should not be reported as fiduciary activities. The statement of fiduciary net position presents the Division's assets and liabilities by major categories and may serve over time as a useful indicator of the Division's financial position. The difference between assets and liabilities represents the net position restricted for pension and other postemployment benefits.

The statement of changes in fiduciary net position provides information on the change in the Division's net position during the current year. Additions are comprised of investment income and member, employer, nonemployer, and employer specific and other contributions. Deductions include retirement and health benefit payments, refunds of contributions, and administrative expenses.

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Management's Discussion and Analysis
(Unaudited)
June 30, 2021

Notes to the Financial Statements

The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements and includes a description of the fiduciary funds.

Other Information

In addition to the basic financial statements and accompanying notes, this report also presents certain required supplementary information, which includes the schedules of changes in net pension liability and related ratios, the schedules of employer contributions, and schedule of investment returns for the pension trust funds as well as the schedule of changes in net OPEB liability and related ratios and the schedule of investment returns for the OPEB plan.

Financial Analysis

Summary of Fiduciary Net Position Pension Trust Funds and Other Postemployment Benefit Plan

_	2021	2020*	Increase/ (Decrease)
_			
\$	26,185,939	33,979,690	(7,793,751)
	2,887,975,978	3,548,193,762	(660,217,784)
	100,481,893,011	80,333,461,729	20,148,431,282
	1,513,246,971	1,416,947,355	96,299,616
	2,287,005,263	2,334,826,814	(47,821,551)
-	107,196,307,162	87,667,409,350	19,528,897,812
	345,330,968	316,817,708	28,513,260
	1,033,329,927	997,361,992	35,967,935
	29,778,664	26,676,218	3,102,446
	33,757,174	44,013,679	(10,256,505)
	1,512,631,432	1,416,478,685	96,152,747
_	2,954,828,165	2,801,348,282	153,479,883
\$	104,241,478,997	84,866,061,068	19,375,417,929
	\$ -	\$ 26,185,939 2,887,975,978 100,481,893,011 1,513,246,971 2,287,005,263 107,196,307,162 345,330,968 1,033,329,927 29,778,664 33,757,174 1,512,631,432 2,954,828,165	\$ 26,185,939 33,979,690 2,887,975,978 3,548,193,762 100,481,893,011 80,333,461,729 1,513,246,971 1,416,947,355 2,287,005,263 2,334,826,814 107,196,307,162 87,667,409,350 345,330,968 316,817,708 1,033,329,927 997,361,992 29,778,664 26,676,218 33,757,174 44,013,679 1,512,631,432 1,416,478,685 2,954,828,165 2,801,348,282

^{* 2020} amounts were adjusted as a result of the adoption of GASB 84.

Assets of the pension trust funds and OPEB plan consist of cash and cash equivalents, investments, contributions due from members and participating employers, accrued interest and dividends on investments, other receivables, securities lending collateral, and members' loans and mortgages. Between State fiscal years 2020 and 2021, total assets increased by \$19.5 billion or 22.3%. This is primarily attributable to an increase of \$20.1 billion in investments partially due to higher returns as explained more thoroughly below. This is offset by a decrease of \$0.7 billion in various receivables, cash & equivalents, and members' loans & mortgages, and an increase of \$96.3 million in securities lending collateral.

Management's Discussion and Analysis
(Unaudited)
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Liabilities of the pension trust funds and OPEB plan consist of retirement benefits payable to retirees and beneficiaries, noncontributory group life insurance (NCGI) premiums payable to the Funds' insurance provider, securities lending collateral and rebates payable, administrative expense payable, and, classified under accounts payable and accrued expenses, outstanding medical claims payable to the medical providers under the OPEB plan. Also included within accounts payable and accrued expenses are liabilities of the pension trust funds for unclaimed member accounts and checks issued to members that have not been negotiated by the members, but remain due and payable. Total liabilities increased by \$153.5 million or 5.4%. This is due to an increase in securities lending collateral and rebates payable of \$96.2 million, an increase of \$67.6 million in retirement benefits and other payables, and a decrease in administrative and miscellaneous expenses of \$10.3 million.

Net position restricted for pension and other postemployment benefits increased by \$19.3 billion or 22.8%.

Summary of Fiduciary Net Position Custodial Fund

	 2021	2020*	Increase/ (Decrease)
Assets:			
Cash and cash equivalents	\$ 148,387	172,866	(24,479)
Receivables	521,839	91,306	430,533
Investments	 24,826,033	21,524,296	3,301,737
Total assets	 25,496,259	21,788,468	3,707,791
Liabilities:			
Accounts payable and accrued expenses	 7,244,804	4,642,461	2,602,343
Total liabilities	 7,244,804	4,642,461	2,602,343
Net position	\$ 18,251,455	17,146,007	1,105,448

^{* 2020} amounts were adjusted as a result of the adoption of GASB 84.

Based on the GASB 84, the Custodial Fund includes the Dental Expense Program (DEP)-Local.

Assets of the custodial fund consists of cash and cash equivalents, receivables, and investments. Between State fiscal years 2020 and 2021, total assets increased by \$3.7 million or 17.0%. This is attributable to the increased amount invested in the Cash Management Fund (CMF) of \$3.3 million and an increase in receivables of \$0.4 million.

Liabilities in the custodial fund is basically accounts payable and accrued expenses including claims payable. Between State fiscal years 2020 and 2021, total liabilities increased by \$2.6 million or 56.1% primarily due to the increased number of claims.

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Management's Discussion and Analysis
(Unaudited)
June 30, 2021

Summary of Changes in Fiduciary Net Position Pension Trust Funds and Other Postemployment Benefit Plan

		2021	2020*	Increase/ (Decrease)
Additions:	-			
Member contributions	\$	2,513,554,110	2,476,946,979	36,607,131
Employer contributions		4,441,571,772	3,911,461,795	530,109,977
Nonemployer contributions		3,162,797,394	2,466,336,628	696,460,766
Employer specific and other contributions		14,419,382	12,027,543	2,391,839
Net investment income		22,361,830,260	1,351,799,032	21,010,031,228
Transfers	_	23,704,540	25,850,306	(2,145,766)
Total additions	_	32,517,877,458	10,244,422,283	22,273,455,175
Deductions:				
Benefits		12,854,092,147	12,392,406,653	461,685,494
Refunds of contributions		209,903,931	202,103,077	7,800,854
Transfers		24,332,121	26,874,616	(2,542,495)
Administrative expenses	_	54,131,330	62,030,962	(7,899,632)
Total deductions	_	13,142,459,529	12,683,415,308	459,044,221
Change in net position	\$_	19,375,417,929	(2,438,993,025)	21,814,410,954

^{* 2020} amounts were adjusted as a result of the adoption of GASB 84.

Additions to the pension trust funds and OPEB plan consist of member, employer, nonemployer, employer specific and other contributions, transfers, and earnings from investment activities. There was an increase of \$22.3 billion or 217.4% in total additions mainly attributable to an increase in net investment income of \$21.0 billion.

Member contributions increased by \$36.6 million mainly due to members' salary increases.

The State contributed \$4,787.0 million to the pension trust funds in State fiscal year 2021. It was composed of \$606.8 million of normal cost and \$4,180.2 million of accrued liability. The contributions were as follows: \$2,880.7 million to TPAF, \$1,270.7 million to PERS, \$444.6 million to the Police & Firemen's Retirement System (PFRS), \$248.0 thousand to Consolidated Police and Fire Pension Fund (CPFPF), \$51.3 million to JRS, and \$139.5 million to the State Police Retirement System (SPRS). Between fiscal year 2020 and 2021, the State increased its contribution to the pension trust funds by \$1,034.8 million from \$3,752.2 million to \$4,787.0 million. The State has followed a funding policy over the last several years, which is to increase its contribution to the pension trust funds by 10% of the actuarially recommended contribution each fiscal year. The contributions for fiscal year 2020 and 2021 were approximately 70% and 80% of the full actuarially recommended contribution, respectively.

State NCGI contributions for the State fiscal year totaling \$117.5 million were as follows: \$55.3 million for TPAF, \$48.6 million for PERS, \$10.7 million for PFRS, \$1.2 million for JRS, and \$1.7 million for SPRS. Between State fiscal years 2020 and 2021, the State's contribution toward NCGI increased by \$30.9 million from \$86.6 million to

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Management's Discussion and Analysis
(Unaudited)
June 30, 2021

\$117.5 million due to higher claims activity. State NCGI benefits are funded on a pay-as-you-go basis. The local contributions for PERS and PFRS are included in the annual billings to local employers.

The annual local employer pension appropriation billings increased per the actuarial valuation as of July 1, 2019. For PERS, the amount accrued in State fiscal year 2020 for normal contribution, accrued liability, and NCGI was \$1,093.9 million and was due on April 1, 2021. For State fiscal year 2021, the total amount accrued was \$1,117.1 million and is due April 1, 2022. For PFRS, the total amount accrued in State fiscal year 2020 for normal contributions, accrued liability, and NCGI was \$1,117.3 million and was due April 1, 2021. For State fiscal year 2021, the total amount accrued was \$1,165.6 million and is due April 1, 2022.

During fiscal year 2021, the global economic and financial markets continued to recover from the tumults experienced in the spring of 2020. U.S equities outpaced the rise of the broader global market as the largest implementation of fiscal and monetary stimulus in U.S. history helped to accelerate growth and further expand the re-opening of the economy.

JRS, Prison Officers' Pension Fund (POPF), SPRS, Consolidated Police and Firemen's Pension Fund (CPFPF), TPAF, PFRS, and PERS (collective the Pension Funds) returned +28.63% during fiscal year 2021, outperforming both, its benchmark and long-term objectives. The pension fund benefited from strong performance in several markets and asset classes including the major equity markets. Both, public and private market asset classes delivered strong performance with Private Equity being the best performing asset class returning +47.89%, closely followed by U.S. Equity, Emerging Markets Equity and Developed Markets Equity returning +44.31%, +43.55% and +34.13%, respectively.

The remaining private market asset classes also performed well and delivered strong returns. Real Assets, Private Credit, Real Estate, and Risk Mitigation delivered stellar returns. While the overall fixed income portfolio returned +0.90% for fiscal year 2021, there was greater dispersion amongst fixed income portfolio components. High yield and Investment Grade Credit Investments returned +15.84% and +0.67%, respectively, while U.S. Treasuries delivered -3.43%.

In reference to Schedule of Investment Returns – Annual Money-Weighted Rate of Return, Net of Investment Expense (see Required Supplementary Information Schedule 3), the State fiscal year 2021 rate was 28.60% compared to 1.40% in the prior year for JRS, SPRS, TPAF, PFRS, and PERS. It was based on Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25* (GASB 67).

Deductions to the pension trust funds and OPEB plan are mainly comprised of pension benefit payments to retirees and beneficiaries, refunds of contributions to former members, transfers, and administrative costs incurred by the Funds to operate the pension trust funds and the OPEB plan. Also included are claim charges for the self-insured health and prescription drug benefit programs and premiums paid to the health insurance carriers for the insured plans. Between State fiscal years 2020 and 2021, benefit payments increased by \$461.7 million or 3.7% due to an increase in the number of retirees receiving retirement and other benefits.

The change in net position of \$21.8 billion was mainly attributable to the increase in net investment income of \$21.0 billion and the increase of \$1.3 billion in member, employer, and nonemployer contributions offset by the increase in benefit expense of \$0.5 billion.

Management's Discussion and Analysis
(Unaudited)
June 30, 2021

Summary of Changes in Fiduciary Net Position Custodial Fund

	 2021	2020*	(Decrease)
Additions: Other contributions Net investment income	\$ 62,851,672 24,070	60,322,505 198,121	2,529,167 (174,051)
Total additions	62,875,742	60,520,626	2,355,116
Deductions: Payments on behalf of local governments	61,770,294	47,866,510	13,903,784
Total deductions	61,770,294	47,866,510	13,903,784
Change in net position	\$ 1,105,448	12,654,116	(11,548,668)

^{* 2020} amounts were adjusted as a result of the adoption of GASB 84.

Additions to the custodial fund consists of funds collected for local government employees' and retirees' dental benefits, which are not administered through a trust, and earnings from investment activities. There was an increase of \$2.4 million or 3.9% in total additions mainly attributable to an increase in the funds collected.

Deductions to the custodial fund is mainly comprised of amounts paid on behalf of local government employees and retirees related to the premiums for dental insurance. Between State fiscal years 2020 and 2021, the amounts disbursed increased by \$13.9 million or 29.0% due to an increase in the number of claims.

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Management's Discussion and Analysis
(Unaudited)
June 30, 2021

Investment Performance

The rates of return (i.e. investment performance, which includes income and changes in the fair value of investments) for the Pension Funds and various market indices are as follows:

	Year ended June 30 2021		Year ended June 30 2021
U.S. Equity	44.31%	Private Credit	23.53
Custom US Policy Benchmark	44.43	Bloomberg US Corp HY 1 Month lag +100bps	16.10
Non-U.S. Developed Markets Equity	34.13	Investment Grade Credit	0.67
Custom EAFE + Canada Benchmark	33.33	Custom Investment Grade Credit Benchmark	0.99
Emerging Markets Equity	43.55	Income	10.96
Custom EM Benchmark	40.98	Income Benchmark	7.94
Private Equity	47.89	Cash Equivalents	0.25
Custom Cambridge Blend	48.43	ICE BofA US 3-Month Treasury Bill	0.09
Global Growth	42.83	U.S. Treasuries	(3.43)
Global Growth Benchmark	43.41	Custom Government Benchmark	(3.22)
Real Estate	21.21	Risk Mitigation Strategies	13.27
Real Estate Index	1.47	T-Bill + 300 BP	3.15
Real Assets	29.97	Defensive	1.33
Custom Commodities and Real Asset Benchmark	18.80	Liquidity Benchmark	(0.49)
Real Return	23.55	Opportunistic Private Equity	37.52
Real Return Benchmark	6.19	Custom Cambridge Blend	48.43
High Yield	15.84	Total Pension Funds	28.63
Custom High Yield Benchmark	15.34	Pension Fund Policy Index	26.28

Overall Financial Condition of the Funds

Based on GASB 67 and actuaries' GASB 67 disclosures for State fiscal year 2021, for the defined benefit pension trust funds, the combined state and local ratios of plan fiduciary net position as a percentage of the total pension liability was 50.07% and the net pension liability as a percentage of covered payroll was 351.57%. For the prior year, the combined state and local ratios of plan fiduciary net position as a percentage of the total pension liability was 38.37% and the net pension liability as a percentage of covered payroll was 472.63%.

For the OPEB plan, total expenses incurred exceeded total revenues recognized by \$114.6 million, decreasing the surplus at the beginning of the year from \$164.9 million to \$50.3 million at year-end. There was a 5.8% increase in Net Change in Plan Fiduciary Net Position (further drop) from July 1, 2020 to June 30, 2021 due to a 9.3% increase in benefit payments for the same period.

For the New Jersey State Employees Deferred Compensation Plan and the Supplemental Annuity Collective Trust, members are 100% vested in the present value of their contributions and the funds have sufficient assets to meet future benefit obligations.

Contacting System Financial Management

This financial report is designed to provide our members, beneficiaries, investors, and other interested parties with a general overview of the Funds' finances and to show the Funds' accountability for the money it receives. This

Management's Discussion and Analysis (Unaudited) June 30, 2021

report is available on the Division of Pensions and Benefits website at www.state.nj.us/treasury/pensions. If you have any questions about this report or need additional financial information, contact the Division of Pensions and Benefits, P.O. Box 295, Trenton, NJ 08625-0295.

Statement of Fiduciary Net Position Fiduciary Funds

June 30, 2021

	Tr	Pension ust Funds and Other Postemployment Benefit Plan	Custodial Fund
Assets:			
Cash and cash equivalents	\$	26,185,939	148,387
Receivables: Contributions: Members Employers and nonemployer Accrued interest and dividends Other	_	216,500,811 2,581,384,626 5,163,401 84,927,140	48,253 — 473,586
Total receivables	_	2,887,975,978	521,839
Investments, at fair value: Cash Management Fund Common Pension Fund A Common Pension Fund D Common Pension Fund E Domestic equities Fixed income mutual funds Equity mutual funds	_	2,679,167,903 47,231,724 62,735,227,779 28,961,199,281 1,078,510,792 602,093,927 4,378,461,605	24,826,033 — — — — — —
Total investments		100,481,893,011	24,826,033
Securities lending collateral Members' loans and mortgages		1,513,246,971 2,287,005,263	
Total assets		107,196,307,162	25,496,259
Liabilities: Accounts payable and accrued expenses Retirement benefits payable Noncontributory group life insurance premiums payable Administrative expense payable Securities lending collateral and rebates payable		345,330,968 1,033,329,927 29,778,664 33,757,174 1,512,631,432	7,244,804 — — — —
Total liabilities		2,954,828,165	7,244,804
Net position: Restricted for pension and other postemployment benefits Restricted for individuals, organizations, and other governments	\$ <u></u>	104,241,478,997 —	 18,251,455

Combining Statement of Fiduciary Net Position Fiduciary Funds – Pension Trust Funds and Other Postemployment Benefit Plan

June 30, 2021

Other

					Defined Ben	efit Pension Plans				Defined Contribution	on Pension Plans	Postemployment Benefit Plan		
	_	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Central Pension Fund	New Jersey State Employees Deferred Compensation Plan	Supplemental Annuity Collective Trust	State Health Benefits Local Government Retired Employees Plan	Total	
Assets:	•			504.050	50.000	5 400 400	4 700 000	0.470.075	40.005	450.000		T 000 040		
Cash and cash equivalents	\$	293,674	77,237	531,979	50,990	5,190,499	4,706,062	8,173,275	16,365	150,300	1,005,246	5,990,312	26,185,939	
Receivables: Contributions:														
Members		401,903	_	3,298,023	_	97,194,185	53,637,567	60,457,734	_	_	482,577	1,028,822	216,500,811	
Employers and nonemployer		83,475	_	74,256	_	92,964,171	1,230,855,642	1,248,049,492	_		470.447	9,357,590	2,581,384,626	
Accrued interest and dividends Other		144 24,479	3 4,331	581 974,577	168,135	11,987 33,864,234	4,136,659 6,120,518	10,868 22,243,398	1 —	823,738	179,417 —	 21,527,468	5,163,401 84,927,140	
Total receivables	-	510,001	4,334	4,347,437	168,138	224,034,577	1,294,750,386	1,330,761,492		823,738	661,994	31,913,880	2,887,975,978	
Investments, at fair value;	-	310,001	7,007	4,047,407	100,100	224,004,011	1,234,730,300	1,000,701,402	<u>-</u>	020,700	001,334	31,313,000	2,001,010,010	
Cash Management Fund Common Pension Fund A		21,869,272 127,526	5,117,493 —	50,260,743 1,620,048	2,038,584	744,784,521 19,827,878	821,463,484 —	948,419,967 25,656,272	114,403	20,016,321	355,799 —	64,727,316	2,679,167,903 47,231,724	
Common Pension Fund D Common Pension Fund E Domestic equities		112,918,682 52,123,260	_ _	1,444,031,009 645,037,919	_ _ _	17,671,105,148 8,157,722,880	20,643,706,166 9,529,999,441	22,863,466,774 10,576,315,781 —	_	764,997,915	 313,512,877	_	62,735,227,779 28,961,199,281 1,078,510,792	
Fixed income mutual funds Equity mutual funds	_									602,093,927 4,378,461,605	513,512,677 — ————		602,093,927 4,378,461,605	
Total investments	_	187,038,740	5,117,493	2,140,949,719	2,038,584	26,593,440,427	30,995,169,091	34,413,858,794	114,403	5,765,569,768	313,868,676	64,727,316	100,481,893,011	
Securities lending collateral Members' loans and mortgages	_	2,723,731 190,883		34,831,716 11,006,147		426,247,645 251,970,606	497,950,329 1,499,952,093	551,493,550 523,885,534					1,513,246,971 2,287,005,263	
Total assets	_	190,757,029	5,199,064	2,191,666,998	2,257,712	27,500,883,754	34,292,527,961	36,828,172,645	130,769	5,766,543,806	315,535,916	102,631,508	107,196,307,162	
Liabilities: Accounts payable and accrued														
expenses Retirement benefits payable Noncontributory group life		46 5,209,330	 59,113	206,028 19,927,773	69,712	126,053,254 395,033,511	8,410,108 237,357,092	158,811,686 375,311,544	107,472 23,297	481,787 —	57,801 338,555	51,202,786 —	345,330,968 1,033,329,927	
insurance premiums payable Administrative expense payable Securities lending collateral		83,475 181,800	3,907	74,256 717,529	2,535	7,907,637 12,672,576	5,759,495 —	15,953,801 19,021,757		_ _		 1,157,070	29,778,664 33,757,174	
and rebates payable	_	2,722,623		34,817,548		426,074,261	497,747,779	551,269,221					1,512,631,432	
Total liabilities	_	8,197,274	63,020	55,743,134	72,247	967,741,239	749,274,474	1,120,368,009	130,769	481,787	396,356	52,359,856	2,954,828,165	
Net position: Restricted for pension and other postemployment benefits	\$_	182,559,755	5,136,044	2,135,923,864	2,185,465	26,533,142,515	33,543,253,487	35,707,804,636		5,766,062,019	315,139,560	50,271,652	104,241,478,997	
	_									-		-		

Statement of Changes in Fiduciary Net Position Fiduciary Funds

Year ended June 30, 2021

Pension Trust Funds and Other Postemployment Benefit Plan	Custodial Fund	
\$ 2,513,554,110 4,441,571,772 3,162,797,394 14,419,382	 62,851,672	
10,132,342,658	62,851,672	
20,721,748,625 1,651,074,799 22,372,823,424	24,070 24,070	
10,993,164		
22,361,830,260	24,070	
23,704,540		
32,517,877,458	62,875,742	
12,854,092,147 209,903,931 24,332,121 54,131,330	 61,770,294	
13,142,459,529	61,770,294	
19,375,417,929	1,105,448	
84,866,061,068 \$ 104,241,478,997	17,146,007 18,251,455	
	Trust Funds and Other Postemployment Benefit Plan \$ 2,513,554,110	

Combining Statement of Changes In Fiduciary Net Position Fiduciary Funds – Pension Trust Funds and Other Postemployment Benefit Plan

Year ended June 30, 2021

Other

	Defined Benefit Pension Plans										ion Pension Plans	Postemployment Benefit Plan	
	_	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Central Pension Fund	New Jersey State Employees Deferred Compensation Plan	Supplemental Annuity Collective Trust	State Health Benefits Local Government Retired Employees Plan	Total
Additions: Contributions: Members Employers Nonemployer Employer specific and other	\$	9,426,354 52,508,011 —		27,268,772 141,212,825 — —	 248,000 441,879	883,659,076 2,684,911 2,933,363,049 403,226	419,458,195 1,442,270,056 178,577,000 6,161,341	909,939,594 2,477,308,520 13,079,912 7,082,908	241,972 — —	214,036,694 — — —	6,455,552 — — —	43,309,873 325,097,477 37,777,433 —	2,513,554,110 4,441,323,772 3,163,045,394 14,419,382
Total contributions	_	61,934,365	330,028	168,481,597	689,879	3,820,110,262	2,046,466,592	3,407,410,934	241,972	214,036,694	6,455,552	406,184,783	10,132,342,658
Investment income: Net increase in fair value of investments Interest and Dividends	_	34,559,805 2,684,847 37,244,652	6,381 6,381	443,135,634 34,692,856 477,828,490		5,459,925,762 445,035,747 5,904,961,509	6,400,152,014 556,857,635 6,957,009,649	7,115,092,187 596,902,514 7,711,994,701		1,170,606,566 10,424,347 1,181,030,913	98,276,657 4,262,899 102,539,556	201,343 201,343	20,721,748,625 1,651,074,799 22,372,823,424
Less investment expense		18,842	478	223,635	84	2,770,088	4,282,644	3,540,811	_	156,582	_	_	10,993,164
Net investment income		37,225,810	5,903	477,604,855	5,956	5,902,191,421	6,952,727,005	7,708,453,890	190	1,180,874,331	102,539,556	201,343	22,361,830,260
Transfers			_	688,000	_	10,766,456	2,912,909	9,337,175	_	_	_		23,704,540
Total additions		99,160,175	335,931	646,774,452	695,835	9,733,068,139	9,002,106,506	11,125,201,999	242,162	1,394,911,025	108,995,108	406,386,126	32,517,877,458
Deductions: Benefits Refunds of contributions Transfers Administrative and miscellaneous expenses		62,410,001 295,182 — 324,080	642,747 — — — 3,429	237,874,745 85,096 157,527 494,765	702,399 — — — 2,620	4,652,533,310 58,051,016 9,478,706 9,042,590	2,840,947,931 11,135,743 604,094 18,293,096	4,294,237,027 140,317,667 14,091,794 14,120,177	222,935 19,227 —	232,951,509 — — — 516,190	21,927,170 — — —	509,642,373 — — — — — — —	12,854,092,147 209,903,931 24,332,121 54,131,330
Total deductions		63,029,263	646,176	238,612,133	705,019	4,729,105,622	2,870,980,864	4,462,766,665	242,162	233,467,699	21,927,170	520,976,756	13,142,459,529
Change in net position		36,130,912	(310,245)	408,162,319	(9,184)	5,003,962,517	6,131,125,642	6,662,435,334	_	1,161,443,326	87,067,938	(114,590,630)	19,375,417,929
Net position restricted for pension and other postemployment benefits:													
Beginning of year, as restated (note 2(k))	_	146,428,843	5,446,289	1,727,761,545	2,194,649	21,529,179,998	27,412,127,845	29,045,369,302		4,604,618,693	228,071,622	164,862,282	84,866,061,068
End of year	\$ _	182,559,755	5,136,044	2,135,923,864	2,185,465	26,533,142,515	33,543,253,487	35,707,804,636		5,766,062,019	315,139,560	50,271,652	104,241,478,997

Notes to Financial Statements
June 30, 2021

(1) Description of the Plans

(a) Organization

The State of New Jersey, Division of Pensions and Benefits (the Division) was created and exists pursuant to N.J.S.A. 52:18A to oversee and administer the pension trust funds and the other postemployment benefit (OPEB) plan sponsored by the State of New Jersey (the State). The following is a list of the benefit plans, which have been included in the basic financial statements of the Division, collectively referred to as the Plans:

Plan Name	Type of Plan
Defined benefit pension plans:	
Judicial Retirement System (JRS)	Single-employer
Prison Officers' Pension Fund (POPF)	Single-employer
State Police Retirement System (SPRS)	Single-employer
Consolidated Police and Firemen's Pension Fund (CPFPF)	Cost-sharing multiple-employer with special funding situation
Teachers' Pension and Annuity Fund (TPAF)	Cost-sharing multiple-employer with special funding situation
Police and Firemen's Retirement System (PFRS)	Cost-sharing multiple-employer with special funding situation
Public Employees' Retirement System (PERS)	Cost-sharing multiple-employer with special funding situation
Central Pension Fund (CPF)	Single-employer
Defined contribution pension plans:	
New Jersey State Employees Deferred Compensation Plan (NJSEDCP)	Single-employer
Supplemental Annuity Collective Trust (SACT)	Multiple-employer
Defined benefit other postemployment benefit plan:	
State Health Benefits Local Government Retired Employees Plan*	Cost-sharing multiple-employer with special funding situation

^{*} Includes the respective Prescription Drug Program (PDP) of the State, Local and Education SHBP.

The Division's custodial fund accounts for monies held on behalf of local government active employees and retirees that are participating in the State's Dental Expense Program Fund (DEP) – Local. These monies, which are not held in trust, represent amounts collected from active employees, retirees, or local employers that cover the premiums for their active or retired employees, which have not yet been paid to the third-party insurance providers or returned to the party that had contributed them.

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Notes to Financial Statements
June 30, 2021

(b) Defined Benefit Pension Plans

Each defined benefit pension plan's designated purpose is to provide retirement, death, and disability benefits to its members. Below is a summary description of each defined benefit pension plan administered by the Division:

Plan	Established as of	Legislation	Membership
JRS	June 1, 1973	N.J.S.A. 43:6A	All members of the State Judiciary.
POPF*	January 1, 1941	N.J.S.A. 43:7	Various employees in the state penal institutions appointed prior to January 1, 1960.
SPRS	July 1, 1965	N.J.S.A. 53:5A	All uniformed officers and troopers of the Division of State Police.
CPFPF*	January 1, 1952	N.J.S.A. 43:16	County and municipal police and firemen appointed prior to July 1, 1944.
TPAF	January 1, 1955	N.J.S.A. 18A:66	Substantially all teachers or members of the professional staff certified by the State Board of Examiners and employees of the Department of Education, who have titles that are unclassified, professional and certified.
PFRS	July 1, 1944	N.J.S.A. 43:16A	Substantially all full-time county and municipal police or firemen and state firemen or officer employees with police powers appointed after June 30, 1944.
PERS	January 1, 1955	N.J.S.A. 43:15A	Substantially all full-time employees of the State of New Jersey or any county, municipality, school district or public agency, provided the employee is not required to be a member of another state-administered retirement system or other state pension fund or local jurisdiction's pension fund.
CPF*	Various	Various	The CPF is a "pay-as-you-go" benefit plan. The CPF's designated purpose is to provide retirement allow ances under the follow ing series of noncontributory pension acts: Veterans Act Pensioners (N.J.S.A. 43:4-1 to 4-6); Health Pension Act (N.J.S.A. 43:5-1 to 5-4); Pension to Widows of Governors (N.J.S.A. 43:8-2); Disabled Veterans Pension, Surviving Spouse of Veterans (N.J.S.A. 38:18-1 to 18-2 and N.J.S.A. 38:18A-1) and Special Act (N.J.S.A. 43:5A to 5A-1).

^{*} Represents a closed plan.

Notes to Financial Statements
June 30, 2021

The authority to amend the provisions of the above plans rests with legislation passed by the State of New Jersey. Pension reforms enacted pursuant to P.L. 2011, C. 78 included provisions creating special Pension Plan Design Committees for JRS, SPRS, TPAF, and PERS, once a Target Funded Ratio (TFR) is met. These Pension Plan Design Committees will have the discretionary authority to modify certain plan design features, including member contribution rate; formula for calculation of final compensation or final salary; fraction used to calculate a retirement allowance; age at which a member may be eligible and the benefits for service or early retirement; and benefits provided for disability retirement. The committees will also have the authority to reactivate the cost-of-living adjustment (COLA) on pensions. However, modifications can only be made to the extent that the resulting impact does not cause the funded ratio to drop below the TFR in any one year of a 30-year projection period.

The State Legislature adopted P.L. 2018, C. 55 in July 2018, which transferred management of PFRS from the Division to a newly constituted twelve-member PFRS Board of Trustees (PFRSNJ). The PFRSNJ was established in February 2019 per the legislation. In addition to overseeing the management of PFRS, the PFRSNJ has the authority to direct investment decisions, to adjust current benefit levels, and to change member and employer contribution rates. With regard to changes to current benefit provisions, such changes can only be made with the approval of a supermajority of eight (8) of the twelve (12) members of the PFRSNJ. Also, benefit enhancement can only be made if an independent actuary certifies that the benefit enhancements will not jeopardize the long-term viability of PFRS.

Although not currently fully operationalized, in accordance with P.L. 2018, C. 55, the PFRSNJ has the authority to formulate investment policies and direct the investment activities of the assets of the PFRS. The Treasurer, the Division of Investment and PFRSNJ continue to memorialize processes and procedures pertaining to the transition of the assets.

Plan Membership and Contributing Employers

Membership and contributing employers of the defined benefit pension plans consisted of the following at June 30, 2021:

	JRS	POPF	SPRS	CPFPF	TPAF*	PFRS	PERS	CPF
Inactive plan members or beneficiaries currently receiving benefits	640	57	3,479	43	107,890	46,571	184,775	13
Inactive plan members entitled to but not yet								
receiving benefits	6	_	_	_	407	67	877	_
Active plan members	415		2,819		156,402	42,432	246,776	
Total	1,061	57	6,298	43	264,699	89,070	432,428	13
Contributing employers	1	1	1	19	4	581	1,683	1
Contributing nonemployers	_	_	_	1	1	1	1	_

^{*} In addition to the State, who is the sole payer of regular employer contributions to the fund, TPAF's contributing employers include boards of education, who elected to participate in the Early Retirement Incentive Program and continue to pay towards their incurred liability.

Notes to Financial Statements
June 30, 2021

The Defined Benefit Pension Plans' Boards and Composition

The table below represents the composition and source of selection for the defined benefit pension plans' boards:

	SPRS	TPAF	PFRS	PERS
Appointments by:				
Governor	2	2	5	2
Treasurer	1	1	_	1
Superintendent of the				
State Police	2	_	_	_
President of police and				
firemen organizations*	_	_	4	_
Elected by Board or Members		4	3	6
Total	5	7	12	9

^{*} One policeman is selected by the President of the New Jersey State Policemen's Benevolent Association and the New Jersey State Fraternal Order of Police. One fireman is selected by the President of the New Jersey State Firemen's Mutual Benevolent Association and the Professional Firefighters Association of New Jersey.

POPF, CPFPF and CPF are managed by the Division. General responsibility for JRS is vested with the State House Commission.

Contribution Requirements and Benefit Provisions

Significant Legislation

P.L. 2009, C. 19, effective March 17, 2009, provided an option for local employers of PFRS and PERS to contribute 50% of the normal and accrued liability contribution amounts certified for payments due in State fiscal year 2009. Such an employer will be credited with the full payment and any such amounts will not be included in their unfunded liability. The actuaries will determine the unfunded liability of those retirement systems, by employer, for the reduced normal and accrued liability contributions provided under this law. This unfunded liability is paid by the employer in level annual payments over a period of 15 years beginning with fiscal year ended June 30, 2012 and will be adjusted by the rate of return on the actuarial value of assets.

Pursuant to the provisions of P.L. 2011, C. 78, COLA increases were suspended for all current and future retirees of all retirement systems.

In accordance with the Lottery Enterprise Contribution Act, L. 2018, c. 98 (LECA), the net proceeds from the New Jersey State Lottery are contributed to the TPAF, PFRS, and PERS beginning in State fiscal year 2018. For the purpose of depositing the lottery contribution made to the eligible pension plans, LECA established Common Pension Fund L within the Division of Investment. The net lottery proceeds are contributed to the respective pension plans based upon percentages detailed in LECA on a periodic basis through Common Pension Fund L. The Common Pension Fund L investment account is managed and invested by the Director of the Division of Investment, subject to the oversight of the State Investment Council. The Director of the Division of Investment has full discretion to distribute proceeds and all

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Notes to Financial Statements
June 30, 2021

investments thereof and investment earnings thereon from the investment account into investment vehicles managed by the Division of Investment on behalf of the retirement systems.

During fiscal year 2021, the TPAF, PFRS, and PERS recognized \$1.1 billion in net lottery proceeds, which has been included as employer contributions in TPAF, PFRS, and PERS in the accompanying financial statements.

The following are specific contribution requirements and benefit provisions related to each defined benefit plan:

JRS

The contribution policy is set by N.J.S.A. 43:6A and requires contributions by active members and the State of New Jersey. Members enrolled on January 1, 1996 or after, contribute on their entire base salary. Contributions by active members enrolled prior to January 1, 1996 are based on the difference between their current salary and the salary of the position on January 18, 1982. Pursuant to the provisions of P.L. 2011, C. 78, the member contribution rate was 12% in State fiscal year 2021. The State's contribution is based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

The vesting and benefit provisions are set by N.J.S.A. 43:6A. JRS provides retirement benefits as well as death and disability benefits. Retirement is mandatory at age 70. Service retirement benefits are available to members who have reached certain ages and various years of service. Benefits of 75% of final salary are available to members at age 70 with 10 years or more of judicial service; members between ages 65-69 with 15 years or more of judicial service or between ages 60-64 with 20 years or more of judicial service. Benefits of 50% of final salary are available to those with both judicial service and non-judicial service for which five or more consecutive years are judicial service. These benefits are available at age 65 or older with 15 years or more of aggregate service or age 60 or older with 20 years or more of aggregate service. Benefits of 2% of final salary for each year of public service up to 25 years plus 1% of final salary for each year in excess of 25 years are available at age 60 with five consecutive years of judicial service plus 15 years in the aggregate of public service or at age 60 while serving as a judge.

Early retirement benefits of 2% of final salary for each year of service up to 25 years and 1% of final salary for each year over 25 years is available to members who retire before age 60, have 5 or more consecutive years of judicial service, and 25 years or more in aggregate public service. The amount of benefits is actuarially reduced for the number of months remaining until the member reaches age 60.

POPF

There are no active members in POPF. Additionally, based on the recent actuarial valuation, there was no normal cost or unfunded accrued liability contribution required by the State for the fiscal year ended June 30, 2021. The vesting and benefit provisions were set by N.J.S.A. 43:7.

Notes to Financial Statements
June 30, 2021

COLAs are separately funded on a pay-as-you-go basis, which was established pursuant to P.L. 1958, C. 143.

SPRS

The contribution policy is set by N.J.S.A. 53:5A and requires contributions by active members and the State of New Jersey. Pursuant to the provisions of P.L. 2011, C. 78, the active member contribution rate was 9% in State fiscal year 2021. The State's contribution is based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

The vesting and benefit provisions are set by N.J.S.A. 53:5A. SPRS provides retirement benefits as well as death and disability benefits. All benefits vest after ten years of service, and members are always fully vested in their contributions. Mandatory retirement is at age 55. Voluntary retirement is prior to age 55 with 20 years of credited service. The benefit is an annual retirement allowance equal to the greater of (a), (b), or (c), as follows: (a) 50% of final compensation; (b) for members retiring with 25 years or more of service, 65% of final compensation, plus 1% for each year of service in excess of 25 years, to a maximum of 70% of final compensation; or (c) for members as of August 29, 1985 who would not have 20 years of service by age 55, benefit as defined in (a) above. For members as of August 29, 1985, who would have 20 years of service, but would not have 25 years of service at age 55, benefit is as defined in (a) above plus 3% for each year of service.

CPFPF

There are no active members in CPFPF. Additionally, based on the recent actuarial valuation, the State made a contribution of \$248.0 thousand towards the normal cost or unfunded accrued liability during the fiscal year ended June 30, 2021. The vesting and benefit provisions were set by N.J.S.A. 43:16.

COLAs are separately funded on a pay-as-you-go basis, which was established pursuant to P.L. 1958, C. 143.

TPAF

The contribution policy is set by N.J.S.A. 18A:66 and requires contributions by active members and contributing employers. Pursuant to the provisions of P.L. 2011, C. 78, the member contribution rate was 7.5% in State fiscal year 2021. The State's contribution is based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

The vesting and benefit provisions are set by N.J.S.A. 18A:66. TPAF provides retirement, death, and disability benefits. All benefits vest after ten years of service. Members are always fully vested for their own contributions and, after three years of service credit, become vested for 2% of related interest earned on the contributions. In the case of death before retirement, members' beneficiaries are entitled to full interest credited to the members' accounts.

Notes to Financial Statements
June 30, 2021

The following represents the membership tiers for TPAF:

Tier	Definition
1	Members who were enrolled prior to July 1, 2007
2	Members who were eligible to enroll on or after July 1, 2007 and prior to November 2, 2008
3	Members who were eligible to enroll on or after November 2, 2008 and prior to May 22, 2010
4	Members who were eligible to enroll on or after May 22, 2010 and prior to June 28, 2011
5	Members who were eligible to enroll on or after June 28, 2011

Service retirement benefits of 1/55th of final average salary for each year of service credit is available to tiers 1 and 2 members upon reaching age 60 and to tier 3 members upon reaching age 62. Service retirement benefits of 1/60th of final average salary for each year of service credit is available to tier 4 members upon reaching age 62 and tier 5 members upon reaching age 65. Early retirement benefits are available to tiers 1 and 2 members before reaching age 60, tiers 3 and 4 with 25 years or more of service credit before age 62, and tier 5 before age 65 with 30 years or more of service credit. Benefits are reduced by a fraction of a percent for each month that a member retires prior to the retirement age for his/her respective tier. Deferred retirement is available to members who have at least 10 years of service credit and have not reached the service retirement age for the respective tier.

PFRS

The contribution policy is set by N.J.S.A. 43:16A and requires contributions by active members and contributing employers. Pursuant to the provisions of P.L. 2011, C. 78, the active member contribution rate was 10% in State fiscal year 2021. Employers' contributions are based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

The vesting and benefit provisions are set by N.J.S.A. 43:16A. PFRS provides retirement as well as death and disability benefits. All benefits vest after ten years of service, except disability benefits, which vest after four years of service.

The following represents the membership tiers for PFRS:

<u>Tier</u>	Definition
1	Members who were enrolled prior to May 22, 2010
2	Members who were eligible to enroll on or after May 22, 2010 and prior to June 28, 2011
3	Members who were eligible to enroll on or after June 28, 2011

Service retirement benefits are available at age 55 and are generally determined to be 2% of final compensation for each year of creditable service up to 30 years plus 1% for each year of service in excess of 30 years. Members may seek special retirement after achieving 25 years of creditable service, in which benefits would equal 65% (tiers 1 and 2 members) and 60% (tier 3 members) of final compensation plus 1% for each year of creditable service over 25 years, but not to exceed 30 years. Members may elect deferred retirement benefits after achieving ten years of service, in which case benefits would begin at age 55 equal to 2% of final compensation for each year of service.

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Notes to Financial Statements
June 30, 2021

PERS

The contribution policy is set by N.J.S.A. 43:15A and requires contributions by active members and contributing employers. Pursuant to the provisions of P.L. 2011, C. 78, the member contribution rate was 7.5% in State fiscal year 2020. The rate for members who are eligible for the Prosecutors Part of PERS (P.L. 2001, C. 366) was 10% in State fiscal year 2021. Employers' contributions are based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

The vesting and benefit provisions are set by N.J.S.A. 43:15A. PERS provides retirement, death, and disability benefits. All benefits vest after ten years of service.

The following represents the membership tiers for PERS:

Tier	Definition
1	Members who were enrolled prior to July 1, 2007
2	Members who were eligible to enroll on or after July 1, 2007 and prior to November 2, 2008
3	Members who were eligible to enroll on or after November 2, 2008 and prior to May 22, 2010
4	Members who were eligible to enroll on or after May 22, 2010 and prior to June 28, 2011
5	Members who were eligible to enroll on or after June 28, 2011

Service retirement benefits of 1/55th of final average salary for each year of service credit is available to tiers 1 and 2 members upon reaching age 60 and to tier 3 members upon reaching age 62. Service retirement benefits of 1/60th of final average salary for each year of service credit is available to tier 4 members upon reaching age 62 and tier 5 members upon reaching age 65. Early retirement benefits are available to tiers 1 and 2 members before reaching age 60, tiers 3 and 4 with 25 years or more of service credit before age 62, and tier 5 with 30 years or more of service credit before age 65. Benefits are reduced by a fraction of a percent for each month that a member retires prior to the age at which a member can receive full early retirement benefits in accordance with their respective tier. Tier 1 members can receive an unreduced benefit from age 55 to age 60 if they have at least 25 years of service. Deferred retirement is available to members who have at least 10 years of service credit and have not reached the service retirement age for the respective tier.

CPF

The State of New Jersey makes an annual appropriation payment to CPF to pay current year benefits. The contribution requirements were established by the statutes mentioned in the previous table and are not actuarially determined.

COLAs are separately funded on a pay-as-you-go basis, which was established pursuant to P.L. 1958, C. 143. Benefits are payable under various State of New Jersey legislation in an amount equal to one-half of the compensation received by the participant for his/her service.

Notes to Financial Statements
June 30, 2021

(c) Defined Contribution Pension Plans

The Division administers the following defined contribution plans to certain members as further discussed below:

Plan	Established as of	Legislation	Membership
NJSEDCP	June 19, 1978	Chapter 39, P.L. 1978, amended by Chapter 449, P.L. 1985, effective January 14, 1986, and further amended by Chapter 116, P.L. 1997, effective June 6, 1997	Any state employee w ho is a member of a state-administered retirement system or an employee of an eligible state agency, authority, commission or instrumentality of state government provided the employee has at least 12 continuous months of employment, and any individual employed through a Governor's appointment.
SACT	1963	Chapter 123, P.L. 1963, amended by Chapter 90, P.L. 1965	Active members of several state-administered retirement systems to provide specific benefits to supplement the guaranteed benefits that are provided by their basic retirement system.

Plan Membership

At June 30, 2021, membership in the defined contribution pension plans consisted of the following:

Plan	Members
NJSEDCP	57,438
SACT	2.896

Contribution Requirements and Benefit Provisions

NJSEDCP

Participants may defer between 1% and 100% of their salary, less any Internal Revenue Code (IRC) Section 414(h) reductions, or \$19,500 annually. Under the limited "catch-up" provision, a participant may be eligible to defer up to a maximum of twice the annual maximum in the three years immediately preceding the retirement age at which no reduction in benefits would be applicable.

There are no employer or nonemployer entities that are required to contribute to the plan.

Assets in the plan are held in trust for the exclusive benefit of plan members and their beneficiaries in accordance with Governmental Accounting Standards Board (GASB) Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*. Plan members are fully vested for the current valuation of their account from the date of enrollment in the plan. Benefits are payable upon separation from service with the State of New Jersey.

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SACT

Participants contribute through payroll deductions and may contribute from 1% to 100% of their base salary. Contributions are voluntary and may be suspended at the beginning of any quarter. Contributions under the Tax Sheltered Supplemental Annuity Plan are subject to Federal law limitations and qualify for tax-sheltered treatment permitted under Section 403(b) of the IRC. Participants are always fully vested for the accumulated units in their accounts.

Upon retirement, a participant receives a life annuity benefit or may elect to receive a benefit paid as a single cash payment or various forms of monthly annuity payments with a beneficiary provision based on the value of the participant's account in the month of retirement. Upon the death of a participant, the designated beneficiary may elect to receive a lump sum equal to the account value or an annuity under any of the settlement options, which a retiree could elect under SACT. Upon termination of employment and withdrawal from the basic retirement systems, a participant must also withdraw his/her account under SACT as a lump-sum settlement.

(d) Other Postemployment Benefit Plan

The Division administers the State Health Benefits Local Government Retired Employees plan. The plan was established in 1961 under Title 52 Article 14 – 17.25 et. seq. and offers medical and prescription coverage to qualified local government public retirees and their spouses. Local employers must adopt a resolution to participate. The OPEB plan is overseen by the State Health Benefits Commission (the Commission), which was established by NJSA 52:14-17.27. The Commission reviews any member appeals related to member eligibility, benefit or claim denial, and benefit payments for the medical and prescription drug claims. They also have contracting authority for vendors to administer the medical and prescription drug programs as well as the health benefit consultant and actuary. Further, they approve the premiums for the various plans on an annual basis. The Commission is comprised of one representative each from the Office of the Treasurer, Department of Banking and Insurance, Civil Service Commission, State Employee Union, and Local Employee Union.

Plan Membership and Contributing Employers

Membership and contributing employers/nonemployers of the defined benefit OPEB plan consisted of the following at June 30, 2021:

Inactive plan members or beneficiaries currently receiving benefits	32,624
Inactive plan members entitled to but not yet receiving benefits	_
Active plan members	64,243
Total	96,867
Contributing employers	585
Contributing nonemployers	1

Contribution Requirements and Benefit Provisions

The funding policy for the OPEB plan is pay-as-you-go; therefore, there is no prefunding of the liability. However, due to premium rates being set prior to each calendar year, there is a minimal amount of net position available to cover benefits in future years. Contributions to pay for the health benefit premiums of participating employees in the OPEB plan are collected from the State of New Jersey, participating local

Notes to Financial Statements
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employers, and retired members. The State of New Jersey makes contributions to cover those employees eligible under P.L. 1997, C. 330 as disclosed below. Local employers remit employer contributions on a monthly basis. Retired member contributions are generally received on a monthly basis.

The employers participating in the OPEB plan made a contribution of \$325.1 million and the State of New Jersey, as the nonemployer contributing entity, contributed \$37.8 million for fiscal year 2021.

Pursuant to P.L, 2011, C. 78, future retirees eligible for postretirement medical coverage who have less than 20 years of creditable service on June 28, 2011 will be required to pay a percentage of the cost of their health care coverage in retirement provided they retire with 25 or more years of pension service credit. The percentage of the premium for which the retiree will be responsible will be determined based on the retiree's annual retirement benefit and level of coverage.

The State provides partially funded benefits to certain local police officers and firefighters who retire with 25 years of service or on disability from an employer who does not provide coverage under the provisions of P.L. 1997, C. 330. To be eligible for Chapter 330 postretirement medical benefits, the employee must have retired from an employer who does not provide any payment toward health insurance at retirement.

(2) Summary of Significant Accounting Policies

(a) Reporting Entity

The financial statements include all funds, which are administered by the Division over which operating controls are with the individual Plan's governing Boards and/or the State of New Jersey. The financial statements of the Plans and the custodial fund are included in the financial statements of the State of New Jersey; however, the accompanying financial statements are intended to present solely the funds listed above, which are administered by the Division and not the State of New Jersey as a whole.

(b) Measurement Focus and Basis of Accounting

The accompanying financial statements were prepared in accordance with U.S. generally accepted accounting principles as applicable to governmental organizations. In doing so, the Division adheres to reporting requirements established by GASB.

The accrual basis of accounting is used for measuring financial position and changes in net position of the pension trust funds, other postemployment benefit plan, and custodial fund. Under this method, contributions are recorded in the accounting period in which they are legally due from the employer or plan member, and deductions are recorded at the time the liabilities are due and payable in accordance with the terms of each plan. The accounts of the Division are organized and operated on the basis of funds. All funds are accounted for using an economic resources measurement focus.

Fiduciary Funds

The Division reports the following types of funds:

Pension trust funds and other postemployment benefit plan – Account for monies received for, expenses incurred by and the net position available for plan benefits of the various public employee retirement systems and an OPEB plan. The pension trust funds include JRS, POPF, SPRS, CPFPF, TPAF, PFRS, PERS, CPF, NJSEDCP, and SACT.

Notes to Financial Statements
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Custodial fund – Custodial fund is used to account for the assets that the Division holds on behalf of others as their agent. Custodial Fund includes the Dental-Local, as described in note 2(k).

(c) Receivables

Receivables consist primarily of member and employer contributions and other amounts that are legally required to be due to the Plans.

(d) Capital Assets

Capital assets utilized by the Division include equipment, which is owned and paid for by the State of New Jersey.

(e) Investments

The Division of Investment, Department of the Treasury, State of New Jersey (Division of Investment) manages and invests certain assets of seven of the defined benefit pension plans (JRS, POPF, SPRS, CPFPF, TPAF, PFRS and PERS) and two defined contribution pension plans (SACT and certain accounts in NJSEDCP). Accounts managed by the Division of Investment included in the accompanying statement of fiduciary net position are: Common Pension Fund D and Common Pension Fund E (collectively known as the Common Pension Funds), SACT and certain accounts in NJSEDCP. Common Pension Fund D invests primarily in global equity and fixed income securities. Common Pension Fund E invests primarily in global diversified credit funds and alternative investments, which includes private equity, real estate, real asset, and absolute return strategy funds.

In addition, the Division of Investment manages the State of New Jersey Cash Management Fund (CMF), which is available on a voluntary basis for investment by State and certain non-State participants. CMF is considered to be an investment trust fund as defined in GASB Statement No. 31, *Certain Investments and External Investment Pools*. Units of ownership in CMF may be purchased or redeemed on any given business day (excluding State holidays) at the unit cost or value of \$1.00. Participant shares are valued on a fair value basis. For additional information about CMF, refer to the audited financial statements, which can be obtained at https://www.nj.gov/treasury/doinvest/cmf/CMFStatementsFiscal2021.PDF

Prudential Retirement is the third-party administrator for the NJSEDCP. Prudential Retirement provides recordkeeping, administrative services and access to 22 investment options through a combination of their separate account product offerings and retail branded mutual funds. The four state-managed investments options (NJSEDCP Fixed Income Fund, NJSEDCP Equity Fund, NJSEDCP Small Capitalization Equity Fund, and NJSEDCP Cash Management Fund) were closed to new contributions on December 31, 2005. On August 1, 2014, the NJSEDCP Fixed Income Fund and the NJSEDCP Cash Management Fund were closed. On December 15, 2014, the NJSEDCP Equity Fund and the NJSEDCP Small Capitalization Fund were opened to new contributions. The Board of the NJSEDCP is the fiduciary for the investments of the Plan. The Division of Pensions and Benefits maintains its administrative oversight functions for the Plan.

Investment transactions are accounted for on a trade or investment date basis. Interest and dividend income is recorded on the accrual basis, with dividends accruing on the ex-dividend date. The net increase in the fair value of investments includes the net realized and unrealized gains or losses on investments.

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(f) Members' Loans

Members of JRS, SPRS, TPAF, PFRS, and PERS who have at least three years of service in these plans may borrow up to 50% of their accumulated member contributions. Repayment of loan balances is deducted from payroll checks and bears a commercially reasonable interest rate as set by the State Treasurer. For 2021, the interest rate was 5.75%. There was a \$15 processing fee per loan. Members who retire with an outstanding loan have the option of paying the loan in full prior to receiving any benefits or continuing their monthly loan payment schedule into retirement.

(g) Administrative Expenses

Administrative expenses are paid by the plans to the State of New Jersey, Department of the Treasury and are included in the accompanying financial statements.

In certain funds (JRS, SPRS, TPAF, PFRS and PERS) miscellaneous expenses and reimbursements from the fund that comprise various adjustments to member and employer accounts are incorporated into the administrative expense amounts included in the accompanying financial statements.

(h) Income Tax Status

Based on Internal Revenue Service (IRS) determination letters received in January 2012 for JRS, POPF, SPRS, TPAF, and PERS and in June 2012 for CPFPF and PFRS, the seven pension funds comply with the qualification requirements of the Internal Revenue Code (IRC).

NJSEDCP and SACT are eligible plans as described in Section 457 and Section 401(a) of the IRC, respectively.

(i) Commitments

Common Pension Fund E is obligated, under certain private equity, real estate, real asset, absolute return strategy, and global diversified credit fund agreements to make additional capital contributions up to contractual levels over the investment period specified for each investment. As of June 30, 2021, Common Pension Fund E had unfunded commitments totaling approximately \$8.57 billion.

(j) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

(k) Adoption of Accounting Pronouncements

During fiscal year 2021, the Division adopted GASB Statement No. 84. GASB Statement No. 84 establishes criteria for identifying fiduciary activities of all state and local governments, focusing on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiary with whom a fiduciary relationship exists. Further, it describes the four fiduciary funds that should be reported when applicable and provides recognition criteria for when a liability to beneficiaries should be recognized.

In connection with the implementation of GASB Statement No. 84, the Division reevaluated the agency funds included in its previously issued financial statements. Based on this reevaluation, it was determined

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June 30, 2021

that the Alternate Benefit Program and the Dental Expense Program – State did not meet the definition of a custodial fund under GASB Statement No. 84 as the State cannot be a fiduciary for its own activities, therefore the funds were removed from the Division's financial statements. Further, it was determined that the Pension Adjustment Fund (PAF) was not a custodial fund, rather a funding mechanism of the COLAs for the POPF, CPFPF and CPF. As such, the management reviewed the historical activity of the PAF and reclassified such activity to the appropriate fund as a beginning of year net position adjustment.

Further, the Division reevaluated the liabilities recognized to beneficiaries under the scope of GASB Statement No. 84, noting that for the remaining custodial fund, (DEP) – Local, certain liabilities previously reported when it was accounted for as an agency fund, were no longer appropriate, as the Division was not compelled to disburse the fiduciary funds. As such, the Division reduced those liabilities as an adjustment to beginning of year net position.

The changes in accounting resulted in the following adjustments as of July 1, 2020:

	Tr	Pension ust Funds and Other Postemployment Benefit Plan	Custodial Fund
Net position:			
Beginning of year, as previously reported	\$	84,864,115,869	_
Reclassification of PAF to POPF		803,277	_
Reclassification of PAF to CPFPF Decrease of liabilities previously recognized that do not meet the definition under GASB		1,141,922	_
Statement No. 84 Net position:		_	17,146,007
Beginning of year, as restated	\$	84,866,061,068	17,146,007
	· —	- 1,000,000,000	,,

(3) Employers' Net Pension Liability (Asset) - Defined Benefit Plans

Components of Net Pension Liability (Asset)

The components of the net pension liability (asset) of the participating employers for the defined benefit plans at June 30, 2021 are as follows:

	_	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Total pension liability Plan fiduciary net	\$	879,178,447	3,526,221	4,059,814,670	2,895,592	74,699,133,697	46,972,674,839	69,310,085,001
position	_	182,559,755	5,136,045	2,135,923,864	2,185,465	26,533,142,515	33,543,253,487	35,707,804,636
Net pension liability (asset)	\$_	696,618,692	(1,609,824)	1,923,890,806	710,127	48,165,991,182	13,429,421,352	33,602,280,365
Plan fiduciary net position as a percentage of the total pension liability		20.76%	145.65%	52.61%	75.48%	35.52%	71.41%	51.52%

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The total pension liability was determined by actuarial valuations as of July 1, 2020, which was rolled forward to June 30, 2021, using the following actuarial assumptions, applied to all periods in the measurement:

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Inflation rate:							
Price	2.75%	N/A	2.75%	N/A	2.75%	2.75%	2.75%
Wage	3.25%	N/A	3.25%	N/A	3.25%	3.25%	3.25%
Salary increases:							
Initial fiscal year applied							
through	2025	NΑ	2025	NΑ	2026	All future years	2026
					1.55% - 4.45%	3.25 - 15.25%	2.00 - 6.00%
Rate	2.00%	N/A	2.95%	N/A	based on years of service	based on years of service	based on years of service
					2.75% - 5.65%		3.00 - 7.00%
Thereafter	2.75%	N/A	3.95%	N/A	based on years of service	Not Applicable	based on years of service
Long-term expected rate of return	7.00%	2.16%	7.00%	2.16%	7.00%	7.00%	7.00%
Period of actuarial experience study upon w hich actuarial assumptions w ere based	July 1, 2014 - June 30, 2018	N/A	July 1, 2014 - June 30, 2018	N/A	July 1, 2015 - June 30, 2018	July 1, 2013 - June 30, 2018	July 1, 2014 - June 30, 2018

N/A - This is a closed plan, therefore there are no active employees.

Notes to Financial Statements
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The following table represents the mortality table and improvement assumptions used:

Plan	Pre-retirement mortality	Post-retirement mortality	Disability
JRS	The Pub-2010 Teachers Above-Median Income Employee mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Teachers Above-Median Income Healthy Retiree mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Non-safety Disabled Retiree mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.
POPF	Not applicable as there are no active members.	The Pub-2010 Public Safety Healthy Retiree mortality table, unadjusted, for healthy retirees, and the Pub-2010 General Healthy Retiree mortality table, unadjusted, for beneficiaries, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Public Safety Disabled Retiree mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.
SPRS	The Pub-2010 Public Safety Above-Median Income Employee mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Public Safety Above-Median Income Healthy Retiree mortality table, unadjusted, for healthy retirees (healthy annuitants) and the Pub-2010 General Above-Median Income Healthy Retiree mortality table, unadjusted, for beneficiaries (contingent annuitants), with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Public Safety Disabled Retiree mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.
CPFPF	Not applicable as there are no active members.	The Pub-2010 Public Safety Healthy Retiree mortality table for healthy retirees and the Pub-2010 General Healthy Retiree mortality table for beneficiaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	Not applicable as there are no disabled retirees.

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Plan	Pre-retirement mortality	Post-retirement mortality	Disability
TPAF	The Pub-2010 Teachers Above-Median Income Employee mortality table with a 93.9% adjustment for males and 85.3% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Teachers Above-Median Income Healthy Retiree mortality table with a 114.7% adjustment for males and 99.6% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Non-Safety Disabled Retiree mortality table with a 106.3% adjustment for males and 100.3% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.
PFRS	The Pub-2010 Safety Employee mortality table with a 105.6% adjustment for males and 102.5% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Safety Retiree Below-Median Income Weighted mortality table with a 96.7% adjustment for males and 96.0% adjustment for females for healthy retirees (healthy annuitants) and Pub-2010 General Retiree Below-Median Income Weighted mortality table, unadjusted, for beneficiaries (contingent annuitants), with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021	The Pub-2010 Safety Disabled Retiree mortality table with a 152.0% adjustment for males and 109.3% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.
PERS	The Pub-2010 General Below-Median Income Employee mortality table with a 82.2% adjustment for males and 101.4% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 General Below-Median Income Healthy Retiree mortality table with a 91.4% adjustment for males and 99.7% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Non-Safety Disabled Retiree mortality table with a 127.7% adjustment for males and 117.2% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.

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Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension trust funds' investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension trust funds' target asset allocation as of June 30, 2021 are summarized in the following table:

Asset Class	JRS, SPRS, TPAF, PFRS & PERS	POPF &
U.S. Equity	8.09%	<u> </u>
Non-U.S. Developed Markets Equity	8.71%	_
Emerging Market Equity	10.96%	_
Private Equity	11.30%	_
Real Estate	9.15%	_
Real Assets	7.40%	_
High Yield	3.75%	_
Private Credit	7.60%	_
Investment Grade Credit	1.68%	_
Cash Equivalents	0.50%	0.50%
U.S. Treasuries	0.95%	_
Risk Mitigation Strategies	3.35%	_

Discount Rate

The discount rates used to measure the total pension liabilities of the plans were as follows:

Plan	Discount Rate
JRS	7.00%
POPF	2.16%
SPRS	7.00%
CPFPF	2.16%
TPAF	7.00%
PFRS	7.00%
PERS	7.00%

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The following table represents the crossover period, if applicable, for each defined benefit plan:

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Period of projected benefit payments for which the following rates were applied:							
Long-term expected rate of return	All periods	Not applicable	All periods	Not applicable	All periods	All periods	All periods
Municipal Bond rate*	Not applicable	All periods	Not applicable	All periods	Not applicable	Not applicable	Not applicable

^{*} The municipal bond return rate used is 2.16%. The source is the Bond Buyer Go 20-Bond Municipal Bond Index, which includes tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Sensitivity of Net Pension Liability

The following presents the net pension liability (asset) of each plan calculated using the discount rates as disclosed above as well as what each plan's 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:

Pension Plan (rates used)		At 1% decrease	At current discount rate	At 1% increase
JRS (6.00%, 7.00%, 8.00%)	_ 	778,016,977	696,618,692	626,337,695
POPF (1.16%, 2.16%, 3.16%)		(1,430,911)	(1,609,824)	(1,771,254)
SPRS (6.00%, 7.00%, 8.00%)		2,425,231,071	1,923,890,806	1,509,496,161
CPFPF (1.16%, 2.16%, 3.16%)		838,844	710,127	593,800
TPAF (6.00%, 7.00%, 8.00%)		56,988,413,045	48,165,991,182	40,755,711,186
PFRS (6.00%, 7.00%, 8.00%)		18,977,500,231	13,429,421,352	8,811,160,472
PERS (6.00%, 7.00%, 8.00%)		41,129,134,773	33,602,280,365	27,222,797,733

Notes to Financial Statements
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(4) Employers' Net Pension Liability - Defined Benefit Plans - OPEB

Components of Net OPEB Liability - OPEB Plan

The components of the net OPEB liability of the participating employers for the OPEB plan at June 30, 2021 are as follows:

 Total OPEB liability
 \$ 18,050,052,887

 Plan fiduciary net position
 50,271,652

 Net OPEB liability
 \$ 17,999,781,235

Plan fiduciary net position as a percentage of the total OPEB liability

0.28%

The total OPEB liability was determined by an actuarial valuation as of July 1, 2020, which was rolled forward to June 30, 2021 using the following actuarial assumptions, applied to all periods in the measurement:

Inflation rate 2.50%

Salary increases*

PERS

Initial fiscal year applied through 2026

Rate 2.00% to 6.00% based on years of service Rate thereafter 3.00% to 7.00% based on years of service

PFRS

Rate for all future years 3.25% to 15.25% based on years of service

Mortality

PERS PUB-2010 General classification headcount-w eighted mortality table with fully

generation mortality improvement projections from the central year using Scale MP-2021

PFRS PUB-2010 Safety classification headcount-weighted mortality table with fully

generation mortality improvement projections from the central year using Scale MP-2021

Long-term rate of return 2.16%

Actuarial assumptions used in the July 1, 2020 valuation were based on the results of the PFRS and PERS experience studies prepared for July 1, 2013 to June 30, 2018 and July 1, 2014 to June 30, 2018, respectively.

^{*} Salary increases are based on the defined benefit plan that the individual is enrolled in and his or her age.

Notes to Financial Statements
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As the OPEB plan only invests in the State of New Jersey CMF, the long-term expected rate of return on OPEB investments was based off the best-estimate ranges of future real rates of return (expected returns, net of OPEB plan investment expense and inflation) for cash equivalents, which is 0.50%.

The discount rate for the OPEB plan was 2.16%. This represents the municipal bond return rate as chosen by the Division. The source is the Bond Buyer Go 20-Bond Municipal Bond Index, which includes tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. As the long-term rate of return is less than the municipal bond rate, it is not considered in the calculation of the discount rate, rather the discount rate is set at the municipal bond rate.

Sensitivity of Net OPEB Liability to changes in the discount rate:

	At 1%	At current	At 1%		
_	decrease (1.16%)	discount rate (2.16%)	increase (3.16%)		
\$	21,182,289,882	17,999,781,235	15,477,574,697		

Sensitivity of Net OPEB Liability to changes in the healthcare trend rate:

Healthcare Cost							
	1% Decrease	Trend Rate	1% Increase				
\$	15,017,879,689	17,999,781,235	21,890,793,528				

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(5) Investments

Investments (including investments held directly by the Common Pension Funds) as of June 30, 2021 are as follows:

Common Pension Fund A:		
Cash Management Fund	\$	1,135
Private equity funds		47,230,589
		47,231,724
Common Pension Fund D:		
Cash	\$	152,963,262
Cash Management Fund	*	1,474,889,265
Domestic equities		26,914,293,345
International equities		18,661,485,144
Domestic fixed income		14,333,382,241
International fixed income		1,024,662,279
Other ⁽¹⁾		173,552,243
		62,735,227,779
Common Pension Fund E:		
Cash	\$	185,904,141
Cash Management Fund		1,880,159,043
Private equity funds		11,478,154,710
Global diversified credit funds		5,278,630,115
Real estate funds		4,059,584,084
Absolute return strategy funds		3,184,449,958
Real assets		1,858,648,653
Opportunistic private equity investments		582,905,255
Domestic equities		425,824,259
Other ⁽¹⁾		26,939,063
		28,961,199,281
All Other Investments:		
Cash Management Fund		2,703,993,936
Domestic equities		1,078,510,792
Fixed income mutual funds		602,093,927
Equity mutual funds		4,378,461,605
-	_	8,763,060,260
Total	\$	100,506,719,044

⁽¹⁾ Includes assets (other than investments) and liabilities included in the net position of the Common Pension Funds. Common Pension Fund D excludes assets and liabilities related to securities lending.

New Jersey State statute provides for a State Investment Council (the Council) and a Director. Investment authority is vested in the Director of the Division of Investment and the role of the Council is to formulate investment policies. The Council issues regulations, which establish guidelines for permissible investments for the Common Pension Funds managed by the Division of Investment, which include global equity investments, non-convertible preferred stocks, covered call options, put options, futures contracts, obligations of the U.S. Treasury, government agencies, corporations, international governments and agencies, global diversified credit investments, swap transactions, state and municipal general obligations, public authority revenue obligations, collateralized notes and mortgages, commercial paper, certificates of deposit, repurchase

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agreements, money market funds, private equity funds, real estate funds, other real assets, absolute return strategy funds, and the CMF.

The Council approves an investment plan that includes a targeted asset allocation, as well as long-term targeted ranges for asset classes. The asset allocation targets approved on July 22, 2020, effective October 1, 2020 by the Council for the Pension Fund, are as follows:

Asset Class	Target
U.S. equity Non-U.S. developed markets equity Emerging markets equity Private equity	27.00% 13.50% 5.50% 13.00%
Global Growth	59.00%
Real Estate Real Assets	8.00% 3.00%
Real Return	11.00%
High yield Private Credit Investment grade credit	2.00% 8.00% 8.00%
Income	18.00%
Cash equivalents U.S. Treasuries Risk mitigation strategies	4.00% 5.00% 3.00%
Defensive	12.00%
Total	100.00%

The asset allocation policy is reviewed on at least an annual fiscal year basis.

Rate of Return

The annual money-weighted rates of return were 28.60% for JRS, SPRS, TPAF, PFRS, and PERS and 0.12% for POPF, CPFPF, and the OPEB Plan. The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amounts of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the end of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

Deposit and Investment Risk Disclosure

Custodial credit risk, as it relates to investments, is the risk that in the event of the failure of the custodian, the Plans will not be able to recover the value of investments or collateral securities that are in the possession of the third party. The Plans' investment securities are not exposed to custodial credit risk as they are held in segregated accounts in the name of the Plans with the custodians.

The Plans' investments are subject to various risks. Among these risks are credit risk, concentration of credit risk, interest rate risk, and foreign currency risk. Each one of these risks is discussed in more detail below.

Notes to Financial Statements
June 30, 2021

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The credit risk of issuers and debt instruments is evaluated by nationally recognized statistical rating agencies, such as Moody's Investors Service, Inc. (Moody's), Standard & Poor's Corporation (S&P), and Fitch Ratings (Fitch). Concentration of credit risk is the risk of loss attributed to the magnitude of an investment in a single issuer. There are no restrictions in the amount that can be invested in U.S. Treasury and government agency obligations. Council regulations require minimum credit ratings for certain categories of fixed income obligations held directly by the various funds and limit the amount that can be invested in any one issuer or issue.

Notes to Financial Statements
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The credit ratings and limits for the Pension Funds as of June 30, 2021 are as follows:

Limitation of issuer's

	N	/linimum rating		outstanding	Limitation	
Category	Moody's	S&P	Fitch	debt/stock	of issue	Other limitations
Certificates of deposit Domestic	P-1	A-1	F-1	10%	_	Split rating allowable. Not more than 5% of
International	P-1	A-1	F-1	10%	_	pension fund assets can be invested in any one issuer and affiliated entities.
Collateralized notes and mortgages	Baa3	BBB-	BBB-	_	25%	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Commercial paper	P-1	A-1	F-1	_	_	Split rating allowable. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Global debt obligations	Baa3	BBB-	BBB-	10%	_	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Global diversified credit investments: Direct bank loans Funds	=	=	Ξ	10% —	Ξ	Not more than 10% of pension fund assets can be invested in this category. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
International government and agency obligations	Baa3	BBB-	BBB-	25%	25%	Not more than 5% of the pension fund assets can be invested in this category.

Notes to Financial Statements
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	N	linimum ratin	q	Limitation of issuer's outstanding	Limitation	
Category	Moody's	S&P	Fitch	debt/stock	of issue	Other limitations
Money market funds	_	-	_	_	_	Not more than 5% of pension fund assets can be invested in money market funds; limited to 5% of shares or units outstanding.
Mortgage backed						Not more than 10% of
Pass-through securities	A3	A-	A-	_	_	pension fund assets can
Senior debt securities	_	_	_	_	25%	be invested in mortgage
						backed securities.
Non-convertible preferred stocks	Baa3	BBB-	BBB-	10%	25%	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Repurchase agreements						
Bank or trust company	_	_	_	_	_	_
Broker	P-1	A-1	F-1	_	_	_
State, municipal and public authority obligations	A3	A-	A-	10%	10%	Not more than 2% of pension fund assets can be invested in debt of any one obligor.
Swap transactions	Baa2	BBB	BBB	_	_	Notional value of net exposure to any one counterparty shall not exceed 1% of pension fund assets. Notional value of all swap transactions shall not exceed 5% of pension fund assets, but may be increased to 10% for a

Up to 8% of the fair value of the combined assets of the Pension Funds may be invested in global debt obligations, collateralized notes and mortgages, non-convertible preferred stock, and mortgage-backed pass-through securities that do not meet the minimum credit rating requirements set forth above.

40 (Continued)

fixed period of time.

Notes to Financial Statements
June 30, 2021

The total amount of a particular class of stock directly purchased of any one entity by the Common Pension Funds cannot exceed 10% of that class of stock outstanding. The total amount of shares or interests directly purchased or acquired of any one exchange traded fund or global, regional or country fund by the Common Pension Funds shall not exceed 10% of the total shares outstanding or interests of such fund.

The NJSEDCP Equity Fund and the NJSEDCP Small Capitalization Equity Fund are invested in equity securities that are denominated in U.S. dollars that trade on a securities exchange in the United States or the over-the-counter market. The NJSEDCP Equity Fund and the NJSEDCP Small Capitalization Equity Fund may hold up to 25% of their assets either in short-term fixed income securities, as permitted by the Council regulations, or in CMF. Not more than 10% of the market value of the NJSEDCP Equity Fund or the NJSEDCP Small Capitalization Equity Fund can be invested in the equity of any one issuer and affiliated entities. The total amount of a particular class of stock directly purchased or acquired of any one entity cannot exceed 5% of that class of stock outstanding. The total amount of shares directly purchased or acquired of any one exchange traded fund shall not exceed 5% of the total shares outstanding of such fund.

The funds managed by Prudential Retirement investments for the NJSEDCP consist of a number of individual investment managers, which individually have investment guidelines that they comply with and follow. For Prudential Retirement, the NJSEDCP is a participant directed program offering a range of diversified investment alternatives. The options include bond investments, which are diversified by sector and number of securities held, mitigating undue concentration of both credit and foreign currency risks as well as interest rate risk.

SACT can only invest in equity securities denominated in U.S. dollars that are traded on a securities exchange in the United States or over-the-counter market. For SACT, not more than 10% of the market value of the fund can be invested in the equity of any one issuer and affiliated entities. The total amount of shares directly purchased or acquired of any one exchange traded fund shall not exceed 5% of the total shares outstanding of such fund. The total amount of a particular class of stock directly purchased or acquired of any one entity shall not exceed 5% of that class of stock outstanding.

The following tables disclose aggregate fair value, by major credit quality rating category as of June 30, 2021 for the fixed income securities held directly by the Common Pension Funds. The first table includes fixed income securities rated by Moody's. The second table discloses S&P's and Fitch's ratings for fixed income securities not rated by Moody's (in thousands).

Moody's rating									
Aaa	Aa	A	Baa	Ва	B	Caa	Ca	С	Totals
556,561	1,086,607	4,219,545	376,669	461,123	492,656	164,284	1,688	387	7,359,520
5,795,743	_	_	_	_	_	_	_	_	5,795,743
189,363	401,692	46,558	_	_	_	_	_	_	637,613
10,577	42,205	55,463	25,139	82,542	116,896	27,504	318	_	360,644
208,570	_	_		_	_	_	_	_	208,570
_	20,001	_		_	_	_	_	_	20,001
7,955	_	_	_	_	_	_	_	_	7,955
_	_	_	_	69	426	_	_	_	495
6,768,769	1,550,505	4,321,566	401,808	543,734	609,978	191,788	2,006	387	14,390,541
	556,561 5,795,743 189,363 10,577 208,570 - 7,955	556,561 1,086,607 5,795,743 — 401,692 10,577 42,205 208,570 — 20,001 7,955 — —	5 556,561 1,086,607 4,219,545 5,795,743 — — — — 189,363 401,692 46,558 10,577 42,205 55,463 208,570 — — — — 20,001 — 7,955 — — —	5 556,561 1,086,607 4,219,545 376,669 5,795,743 — — — — 189,363 401,692 46,558 — 10,577 42,205 55,463 25,139 208,570 — — — — 20,001 — — 7,955 — — —	Aaa Aa A Baa Ba 5 556,561 1,086,607 4,219,545 376,669 461,123 5,795,743 — — — — 189,363 401,692 46,558 — — 10,577 42,205 55,463 25,139 82,542 208,570 — — — — 20,001 — — 7,955 — — — — — 69	Aaa Aa A Baa Ba Ba 5 556,561 1,086,607 4,219,545 376,669 461,123 492,656 5,795,743 — — — — — 189,363 401,692 46,558 — — — 10,577 42,205 55,463 25,139 82,542 116,896 208,570 — — — — — — 20,001 — — — — 7,955 — — — — — — — — — — — — — — — — —	Aaa Aa A Baa Ba B Caa 5 556,561 1,086,607 4,219,545 376,669 461,123 492,656 164,284 5,795,743 — — — — — — 189,363 401,692 46,558 — — — — 10,577 42,205 55,463 25,139 82,542 116,896 27,504 208,570 — — — — — — — 20,001 — — — — — 7,955 — — — — — — — — — — — — — — — — — — — —	Aaa Aa A Baa Ba Ba Ca Ca 5 556,561 1,086,607 4,219,545 376,669 461,123 492,656 164,284 1,688 5,795,743 — — — — — — — — 189,363 401,692 46,558 — <td< td=""><td>Aaa Aa A Baa Ba B Caa Ca C 5 556,561 1,086,607 4,219,545 376,669 461,123 492,656 164,284 1,688 387 5,795,743 — — — — — — — — — 189,363 401,692 46,558 — <</td></td<>	Aaa Aa A Baa Ba B Caa Ca C 5 556,561 1,086,607 4,219,545 376,669 461,123 492,656 164,284 1,688 387 5,795,743 — — — — — — — — — 189,363 401,692 46,558 — <

Notes to Financial Statements
June 30, 2021

	Standard and Poor's rating					Fitch's rating				
	Α	BBB	ВВ	B	CCC	ВВ	В	CCC	<u> </u>	Totals
Corporate obligations	\$ 271,650	38,546	7,671	1,376	295	672	_	_	202	320,412
International corporate obligations	716	8,126	7,007	8,223	476	_	701	1,016	_	26,265
Asset backed securities		331								331
	\$ 272,366	47,003	14,678	9,599	771	672	701	1,016	202	347,008

The tables do not include certain domestic and international corporate obligations and certain fixed income mutual funds, which invest in an underlying portfolio of fixed income securities, totaling \$1,222,589,716 and do not have a Moody's, S&P, or Fitch rating. The above tables also do not include investment in the Cash Management Fund totaling \$6,059,043,379, which is not rated.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Commercial paper must mature within 270 days. Certificates of deposits are limited to a term of one year or less. Repurchase agreements must mature within 30 days. Council regulations permit the Common Pension Funds to enter into foreign exchange contracts for the purpose of hedging the international portfolio.

The following table summarizes the maturities (or, in the case of Remics and mortgage-backed securities, the expected average life) of the Common Pension Funds' fixed income portfolio as of June 30, 2021 (in thousands):

	 Maturities in years								
				More	Total				
Fixed income investment type	 Less than 1	1-5	6-10	than 10	fair value				
Corporate obligations	\$ 13,348	1,731,792	3,727,945	2,211,462	7,684,547				
U.S. Treasury bonds	600,799	2,815,845	1,292,005	1,087,094	5,795,743				
Foreign government obligations	126,390	284,014	227,209	_	637,613				
International corporate obligations	600	152,946	192,871	40,632	387,049				
Federal agency obligations	_	186,890	21,680	_	208,570				
Municipal obligations	20,001	_	_	_	20,001				
Mortgages (FHLMC/FNMA/GNMA)	_	702	6,043	1,210	7,955				
Bank Loans	_	69	426	_	495				
Asset backed securities	 			331	331				
	\$ 761,138	5,172,258	5,468,179	3,340,729	14,742,304				

The fixed income exchange traded funds held by the Common Pension Funds and the fixed income mutual funds held by NJSEDCP as of June 30, 2021 were \$615,740,831 and \$602,093,927, respectively. These funds have a weighted average duration of 3.74 and 6.66 years, respectively.

Notes to Financial Statements
June 30, 2021

The Common Pension Funds invest in global markets. Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. The Common Pension Funds had the following foreign currency exposure as of June 30, 2021 (expressed in thousands of U.S. dollars):

Currency		Equities	Fixed income	Alternative investments	Total fair value
Australian dollar	\$	799,384	_	_	799,384
Brazilian real	·	315,759	_		315,759
Canadian dollar		1,261,028	61,992	_	1,323,020
Chilean peso		13,007	· —	_	13,007
Czech koruna		17,701	_	_	17,701
Danish krone		281,375	_	_	281,375
Euro		3,325,010	53,369	1,080,687	4,459,066
Hong Kong dollar		1,694,744	_	_	1,694,744
Hungarian forint		40,089	_	_	40,089
Indonesian rupiah		78,430	_	_	78,430
Japanese yen		2,537,867	_	_	2,537,867
Malaysian ringgit		44,316	_	_	44,316
Mexican peso		106,961	_	_	106,961
New Israeli sheqel		37,346	_	_	37,346
New Taiwan dollar		13,633			13,633
New Zealand dollar		21,611	_	_	21,611
Norwegian krone		57,794	_	_	57,794
Pakistan rupee		556	_	_	556
Philippine peso		18,205	_	_	18,205
Polish zloty		27,218	_	_	27,218
Pound sterling (U.K)		1,607,051	2,429	30,747	1,640,227
Qatari rial		25,426	_	_	25,426
Singapore dollar		126,963	_	_	126,963
South African rand		221,538	_	_	221,538
South Korean won		768,464	_	_	768,464
Swedish krona		420,794	_	_	420,794
Swiss franc		984,649	_	_	984,649
Thailand baht		85,863	_	_	85,863
Turkish lira		28,995	_	_	28,995
UAE dirham		40,565			40,565
	\$	15,002,342	117,790	1,111,434	16,231,566

Notes to Financial Statements
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The Pension Funds' interests in alternative investments may contain elements of credit, currency and market risk. Such risks include, but are not limited to, limited liquidity, absence of regulatory oversight, dependence upon key individuals, speculative investments (both derivatives and nonmarketable investments), and nondisclosure of portfolio composition. Council regulations provide that not more than 38% of the market value of the Pension Funds can be invested in alternative investments, with limits on the individual investment categories of real estate (9%), real assets (7%), private equity (12%) and absolute return strategy (15%). On July 1, 2020 the limits for real estate and private equity were amended to 10% and 15%, respectively.

Not more than 5% of the market value invested through direct investments, separate accounts, fund-of-funds, commingled funds, co-investments and joint ventures in global diversified credit, private equity, real asset and absolute return strategy investments, plus outstanding commitments, may be committed to any one partnership or investment. Investments made through separate accounts, funds-of funds, commingled funds, co-investments and joint ventures cannot comprise more than 20% of any one investment managers' total assets.

As of June 30, 2021, the net position of Common Pension Fund E includes receivables of \$826 thousand related to the redemption of hedge funds.

(6) Securities Lending Collateral

The State Investment Council policies permit the Common Pension Funds and several of the direct pension plan portfolios to participate in securities lending programs, whereby securities are loaned to brokers or other borrowers and, in return, the Common Pension Funds have rights to the collateral received. All of the publicly traded securities held in Common Pension Funds are eligible for the securities lending program. Collateral received may consist of cash, letters of credit, or U.S. Treasury obligations having a fair value equal to or exceeding 102% (U.S. dollar denominated) or 105% (non-U.S. dollar denominated) of the value of the loaned securities at the time the loan is made. Collateral is marked to market daily and adjusted as needed to maintain the required minimum level.

For loans of U.S. government securities or sovereign debt issued by non-U.S. governments, in the event that the fair value of the collateral falls below 100% of the fair value of the outstanding loaned securities to an individual borrower, or the fair value of the collateral of all loans of such securities falls below the collateral requirement, additional collateral shall be transferred by the borrower to the respective funds no later than the close of the next business day so that the fair value of such additional collateral together with collateral previously delivered meets the collateral requirements.

For loans of all other types of securities, in the event that the fair value of the collateral falls below the collateral requirement of either 102% or 105% (depending on whether the securities are denominated in U.S. dollars or a foreign currency, respectively) of the fair value of the outstanding loaned securities to an individual borrower, additional collateral shall be transferred in an amount that will increase the aggregate of the borrower's collateral to meet the collateral requirements. As of June 30, 2021, the Common Pension Funds had no aggregate credit risk exposure to borrowers because the collateral amount held by the Common Pension Funds exceeded the fair value of the securities on loan.

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The contract with the Common Pension Funds' securities lending agent requires them to indemnify the Common Pension Funds if the brokers or other borrowers fail to return the securities and provide that collateral securities may be sold in the event of a borrower default. The Common Pension Funds are also indemnified for any loss of principal or interest on collateral invested in repurchase agreements. The Common Pension Funds cannot participate in any dividend reinvestment program or vote with respect to any securities that are on loan on the applicable record date. The securities loans can be terminated by notification by either the borrower or the Common Pension Funds. The term to maturity of the securities loans is generally matched with the term to maturity of the investment of the cash collateral.

The securities lending collateral is subject to various risks. Among these risks are custodial credit risk, credit risk, concentration of credit risk, and interest rate risk. Securities lending collateral is invested in repurchase agreements, the maturities of which cannot exceed 30 days. The collateral for repurchase agreements is limited to obligations of the U.S. Government or certain U.S. Government agencies, collateralized notes and mortgages, and corporate obligations meeting certain minimum rating criteria. Total exposure to any individual issuer is limited consistent with internal policies for funds managed by the Division of Investment.

For securities exposed to credit risk in the collateral portfolio, the following table discloses aggregate fair value, by major credit quality rating category as of June 30, 2021 (in thousands):

Repurchase agreements
State Street Navigator Securities Lending
Money Market Portfolio

	Rating								
	Aaa/AAA	Not rated	Totals						
\$	1,349,544	_	1,349,544						
_		163,087	163,087						
\$_	1,349,544	163,087	1,512,631						

Custodial credit risk for investments is the risk that in the failure of the counterparty to the transaction, the Pension Funds will not recover the value of the investments that are in the possession of an outside party. The repurchase agreement's underlying securities are held in a segregated account at the tri-party bank.

As of June 30, 2021, the Pension Funds had outstanding loaned investment securities with an aggregate fair value of \$1,474,966,101 and did not hold any noncash collateral. There were no borrowers or lending agent default losses, and no recoveries or prior period losses during the year.

(7) Derivatives

The Pension Funds invest in derivative securities through the Common Pension Funds. A derivative security is an investment whose value is derived from other financial instruments such as commodity prices, bonds and stock prices, or a market index. The Common Pension Funds' derivative securities are considered investment derivative instruments. The fair value of all derivative securities is reported in the statement of fiduciary net position, and the change in fair value is recorded in the statement of changes in fiduciary net position as a net increase or decrease in fair value of investments.

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Derivative transactions involve, to varying degrees, credit risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to terms. Market risk includes, but is not limited to, the possibility that a change in interest rate risk, foreign currency risk, or the value of the underlying securities will cause the value of a financial instrument to decrease or become more costly to settle. The market or the value of underlying security, or securities, risk associated with derivatives, the prices of which are constantly fluctuating, is regulated by imposing limits as to the types, amounts and degree of risk that the Common Pension Funds may undertake as set forth in the Council Regulations.

The Common Pension Funds may use financial futures to replicate an underlying security or indices they wish to hold in the portfolio. In certain instances, it may be beneficial to own a futures contract rather than the underlying security. Additionally, the Common Pension Funds may use futures contracts to improve the yield or adjust the duration of the fixed income portfolio or may sell futures contracts to hedge the portfolio. A financial futures contract is an agreement between a buyer and a seller that is based on a referenced item, such as financial indices, or interest rates or a financial instrument, such as equity or fixed income securities, physical commodities or currencies. Futures contracts may call for physical delivery of specified quantity of the underlying asset at a specified price (futures or strike price) and date, or be settled in cash. Futures contracts must be traded on a securities exchange or over-the-counter market. The net change in the futures contracts value is settled daily in cash with the exchanges. The cash to fulfill these obligations is held in a margin account. As the fair value of the futures contract varies from the original contract price, a gain or loss is paid to or received from the clearinghouse and recognized in the statement of changes in fiduciary net position.

Foreign currency forward contracts are used as a means to hedge against currency risks in the Common Pension Funds. Foreign currency forward contracts are agreements to buy or sell a specific amount of a foreign currency at a specified delivery or maturity date for an agreed upon price. Foreign currency forward contracts are marked to market on a daily basis with the change in fair value included in investment income in the statement of changes in fiduciary net position.

The Common Pension Funds utilize covered call and put options in an effort to add value to or reduce the risk level in the portfolio. Options are agreements that give the owner of the option the right, but not obligation, to buy (in the case of a call option) or to sell (in the case of a put option) a specific amount of an asset for a specific price (called the strike price) on or before a specified expiration date. The Common Pension Funds enter into covered calls when they write (or sell) call options on underlying stocks held by the Common Pension Funds or stock indices. The Common Pension Funds enter into covered put options when they purchase put options on underlying stocks held by the Common Pension Funds or stock indices. The Common Pension Funds enter into put spreads when they purchase put options while simultaneously writing put options on the same underlying securities or indices at a lower strike price. The purchaser of put options pays a premium at the outset of the agreement and stands to gain from an unfavorable change (i.e., a decrease) in the price of the instrument underlying the option. The writer of call options receives a premium at the outset of the agreement and may bear the risk of an unfavorable change (i.e., an increase) in the price of the instrument underlying the option.

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As of June 30, 2021, the Common Pension Fund's derivative investments included foreign currency forward contracts:

	Notional value (local currency)		Receivable	Payable	Change in fair value
Foreign currency forward contracts:					
Buy:					
Euro	26,097	\$	30,969	31,950	(981)
Sell:					, ,
Euro	45,518,526		54,779,419	54,012,968	766,451
Pound sterling	1,593,000	_	2,224,320	2,200,823	23,497
Total forward contracts		\$_	57,034,708	56,245,741	788,967

Certain of the alternative investment funds and partnerships may use derivative instruments to hedge against market risk and to enhance investment returns. At any point during the year, the Common Pension Funds may have additional exposure to derivatives primarily through limited liability vehicles such as limited partnerships and commingled investment funds.

(8) Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between independent market participants at the measurement date. Inputs refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk. Inputs may be observable or unobservable. Observable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. The three levels of the fair value hierarchy are as follows:

Level 1 – Quoted prices are available in active markets for identical investments as of the reporting date.

Level 2 – Pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies.

Level 3 – Pricing inputs are unobservable for the investment and inputs into the determination of fair value require significant management judgment or estimation, including assumptions about risk.

Notes to Financial Statements
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Investments are reported at fair value as follows:

- Domestic and international equity securities and exchange traded funds are valued using closing sales prices reported on recognized securities exchanges on which the securities are principally traded; these securities are included as Level 1 in the chart below. For listed securities having no sales reported and for unlisted securities, such securities will be valued based upon the last reported bid price; these securities are included as Level 2 in the chart below.
- Fixed income and equity mutual funds are valued using the published daily closing prices reported by Prudential and are included as Level 1 in the chart below.
- Foreign and domestic government, agency and corporate obligations, municipal bonds, mortgages, bank loans and asset-backed securities are valued using an evaluated price, which is based on a compilation of primarily observable market information or broker quotes in a non-active market. These are included as Level 2 in the chart below.
- Foreign exchange contracts are valued using industry recognized market-based models to calculate
 the value that a holder or counterparty would receive within the bid-ask spread, in an orderly
 transaction under current market conditions. These securities are included as Level 2 in the chart
 below.
- Distributions from alternative investment vehicles are received as the underlying investments are liquidated. The Plan's ownership interest in partners' capital can never be redeemed, but could be sold subject to approval by the fund's management. As of June 30, 2021, a buyer (or buyers) for these investments have not yet been identified. The partnership interest may be sold at an amount different from the net asset value (NAV) per share (or its equivalent) of the plan's ownership interest in partners' capital.
- The valuation methods for investments measured at the NAV are presented in the table below.

Notes to Financial Statements
June 30, 2021

The following table summarizes the fair value hierarchy of the investment portfolio as of June 30, 2021 (in thousands):

		Total	Level 1	Level 2
Investments at fair value				
Equity securities				
Domestic equities	\$	28,418,629	28,413,064	5,565
International equities		16,973,424	16,973,424	_
Equity mutual funds		4,378,462	4,378,462	_
Exchange traded funds		1,688,061	1,688,061	_
Total equity securities	•	51,458,576	51,453,011	5,565
Debt securities .				
Corporate obligations		7,684,547	_	7,684,547
U.S. Treasury bonds		5,795,743	_	5,795,743
Foreign government obligations		637,613	_	637,613
International corporate obligations		387,049	_	387,049
Federal agency obligations		208,570	_	208,570
Fixed income mutual funds		602,094	602,094	_
Municipal obligations		20,001	_	20,001
Mortgages (FHLMC/FNMA/GNMA)		7,955	_	7,955
Exchanged traded funds		615,741	615,741	_
Bank loans		495	_	495
Asset backed securities		331	_	331
Total debt securities	•	15,960,139	1,217,835	14,742,304
Total investments by fair value level	•	67,418,715	52,670,846	14,747,869
Investments measured at the net asset value (NAV)				
Buyout private equity funds		9,621,268		
Global diversified credit funds		5,325,861		
Real estate funds - equity		3,584,416		
Multi-strategy hedge funds		1,892,540		
Real assets		1,858,649		
Debt related private equity funds		1,353,653		
Opportunistic hedge funds		662,508		
Opportunistic private equity investments		582,905		
Venture capital private equity funds		494,466		
Real estate funds - debt		475,168		
Credit oriented hedge funds		407,136		
Equity oriented hedge funds		222,266		
Secondary private equity funds	_	8,767		
Total investments measured at NAV	-	26,489,603		
Local Government Investment Pool				
Cash Management Fund		6,059,043		
Total investments	\$	99,967,361		
Investment derivative instruments	-			
Foreign currency forward contracts (assets)		57,035	_	57,035
Foreign currency forward contracts (liabilities)		(56,246)		(56,246)
Total investment derivative instruments	\$	789		789

Notes to Financial Statements
June 30, 2021

The following table represents the unfunded commitments, redemptions frequency and redemption notice period for investments measured at NAV as of June 30, 2021 (in thousands):

	Fair Value	Unfunded Commitments*	Redemptions Frequency (if currently eligible)	Redemption Notice Period
Buyout private equity funds (1)	\$ 9,621,268	3,047,634	None	N/A
Global diversified credit funds (2)	5,325,861	1,310,441	Quarterly, semi- annual	45 and 90 days
Real estate funds - equity (3)	3,584,416	1,694,867	Quarterly	15 and 90 days
Multi-strategy hedge funds (4)	1,892,540	243,791	Quarterly, semi- annual	None
Real assets (5)	1,858,649	1,012,948	None	None
Debt related private equity funds (6)	1,353,653	578,496	None	N/A
Opportunistic hedge funds (7)	662,508	25,000	Monthly, quarterly	30-90 days
Opportunistic private equity funds (8)	582,905	327,418	None	N/A
Venture capital private equity funds (9)	494,466	34,926	None	N/A
Real estate funds - debt (10)	475,168	276,387	None	N/A
Credit oriented hedge funds (11)	407,136	_	None	N/A
Equity oriented hedge funds (12)	222,266	_	Quarterly	65 days
Secondary private equity funds (13)	8,767	13,355	None	N/A
Total investments measured at NAV	\$ 26,489,603	8,565,263		

- * The unfunded commitments are comprised of funds at various points in their investment terms. Certain funds are outside of their investment period or within their dissolution period. Per the contractual fund agreements, these funds can no longer draw capital for new investments and thus are highly unlikely to utilize all of the remaining unfunded balances. In addition, the Division of Investment has contractual rights to veto further capital draws of certain funds on behalf of the Common Pension Fund A and E, limiting the ability to draw down these unfunded balances.
- 1. Buyout private equity funds include investments in 85 partnerships and 8 co-investment vehicles, which invest primarily in the equity of established operating companies in order to restructure the target company's reserve capital, management and/or organizational structure or facilitate ongoing growth of the firm. Return on investment is typically realized through an initial public offering, sale or merger of the company, or a recapitalization. All of the investments provide for transfer or sale of limited partnership interest with the prior written approval of the General Partner and seven investments further require the right of first refusal by the other partner in the investment. It is expected that the underlying assets will be liquidated over the next 6 months to 13 years.

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Notes to Financial Statements
June 30, 2021

- 2. Global diversified credit funds include investments in 19 funds and separate account investments that make investment in mezzanine debt, credit structured products, commercial and residential mortgage-backed securities, commercial and residential whole loans, and other similar strategies. One of the funds has a quarterly redemption provision and one fund has a semi-annual redemption provision. Fifteen of these investments cannot be redeemed because the investments include restrictions. As of June 30, 2021, these remaining redemption restriction periods range from 6 months to 5 years. It is expected that the underlying assets will be liquidated over the next 1 to 7 years.
- 3. Real estate funds equity include investments in 48 funds or separate accounts that make investments in the equity of the underlying asset, where the investor acts as a shareholder in a specific property and receives a share of the rental income the property generates. Investments representing approximately 78% of real estate equity investments can never be redeemed. Thirty-nine of the investments provide for the transfer or sale of the limited partnership interest with the prior written approval of the General Partner and nine investments further require the right of first refusal by the other partners in the investment. Distributions from each fund and separate account will be received as the underlying investments are liquidated. It is expected that the underlying assets will be liquidated over the next 6 months to 14 years
- 4. Multi-strategy hedge funds include investments in 11 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. Investments representing approximately 70% of the value of the investments cannot be redeemed because the investment includes restrictions that do not allow for redemptions. As of June 30, 2021, the remaining redemption restriction periods range from 1 to 2 years. Five of the investments are being liquidated as part of the redemption process.
- 5. Real asset funds includes investments in 18 fund or separate account strategies, which invest in the equity or debt of infrastructure, energy, utilities, water, timber, agriculture, metals, mining, and commodity-related and commodity-linked investments. Real asset investments include investments in products, services and technology related to the above. No real asset investments can be redeemed. All of the investments provide for transfer or sale of limited partnership interest with the prior written approval of the General Partner and one investment further requires the right of first refusal by the other partners in the investment. Distributions from each fund and separate account will be received as the underlying investments are liquidated. It is expected that the underlying assets will be liquidated over the next 1 to 15 years.
- 6. Debt related private equity funds include investments in 22 funds employing distressed, turnaround and mezzanine debt strategies. Distressed debt involves purchasing debt securities that are trading at a distressed level, in anticipation that those securities will have a higher market valuation and generate profit at a future date, or strategies which take a position to potentially gain control of an asset. Turnaround investments focus on acquiring voting control in companies that are in distress and aim to subsequently restore the company to profitability. Mezzanine debt strategies provide a middle level of financing in leveraged buyouts, which is below the senior debt layer and above the equity layer. A typical mezzanine investment includes a loan to the borrower, in addition to the borrower's issuance of equity in the form of warrants, common stock, preferred stock, or some other equity investment. All of the investments provide for transfer or sale of the limited partnership interest with the prior written approval of the General Partner. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 6 months to 7 years.

Notes to Financial Statements
June 30, 2021

- 7. Opportunistic hedge funds include investments in 5 hedge funds that invest in speculative opportunities with high net market exposure across varied markets. Opportunistic funds include global macro funds, commodity trading advisor funds, and funds employing other similar strategies. Investments representing approximately 31% of the value of the investments in this type cannot be redeemed because the investments include restrictions. As of June 30, 2021, this remaining redemption restriction period is 1 year.
- 8. Opportunistic private equity funds include investments in 4 funds and separate accounts, which acquire minority equity interests in investment management companies. Investments in these funds have a perpetual term and cannot be redeemed.
- 9. Venture capital private equity funds include investments in 7 partnership vehicles that make equity investments primarily in high growth companies during their early or expansion stages. These companies may or may not have revenues or a client base and in most cases will not be cash flow positive. Distributions from each vehicle will be received as the underlying investments are liquidated. It is expected that the underlying assets will be liquidated over the next 1 to 3 years of the investment.
- 10. Real estate funds debt include investments in 8 funds or separate accounts that make investments in the debt of the underlying asset, where the investor acts as a lender to the property owner and receives an interest rate on the loan. Investments can never be redeemed. Six of the investments provide for transfer or sale of the limited partnership interest with the prior written approval of the General Partner and two investments further require the right of first refusal by the other partners in the investment. Distributions from each fund and separate account will be received as the underlying investments are liquidated. It is expected that the underlying assets will be liquidated over the next 1 to 5 years.
- 11. Credit oriented hedge funds include investments in 5 hedge fund and separate account strategies that include both credit and distressed debt funds. Credit strategies typically invest both long and short in high yield and high-grade bonds, and structured products using fundamental credit analysis. These securities tend to be relatively liquid. Distressed debt strategies take advantage of corporate securities in default, under bankruptcy protection, in distress, or in liquidation. All of the investments are being liquidated in an orderly fashion as part of the redemption process.
- 12. Equity oriented hedge funds include investments in 2 hedge fund and separate account strategies that include both equity long/short and event driven funds. Equity long/short funds hold a combination of long and short positions primarily in publicly traded equities. Event driven funds invest in merger arbitrage, capital structure arbitrage, relative value, activist or other similar strategies. One of the investments is in liquidating and the other investment provides quarterly liquidity.
- 13. Secondary private equity funds include investments in 3 funds that purchase secondary interests in private equity partnerships. The underlying investments represent ownership interests in private equity funds managed by buyout or venture capital firms after the capital has been deployed. Distributions from each fund will be received as the underlying investments are liquidated. It is expected that the underlying assets will be liquidated over the next 1 to 3 years.

(9) Local Employer's Contributions under P.L. 2009, C. 19

As discussed in note 1, in the fiscal year ended June 30, 2009, the State passed P.L. 2009, C. 19 to allow local employers of PFRS and PERS to contribute 50% of the normal and accrued liability contributions amounts, while deferring the remaining amount for a 15-year period with payments beginning in the fiscal year ended

Notes to Financial Statements
June 30, 2021

June 30, 2012. At June 30, 2021, the remaining receivable balances related to P.L. 2009, C. 19 were \$52.3 million and \$17.1 million for PFRS and PERS, respectively.

(10) Reserves

The Plans maintain the following legally required reserves as follows (amounts indicated in parenthesis represent net position restricted for the respective reserve as indicated):

Members' Annuity Savings Reserve and Accumulative Interest Reserve – JRS (\$105,534,091); SPRS (\$247,093,529); TPAF (\$15,888,193,454); PFRS (\$4,184,464,196); PERS (\$16,805,940,473)

The Members' Annuity Savings Reserve (New Jersey Statutes Annotated (NJSA): JRS 43:6A- 34.1 and 34.2; SPRS 53:5A-35; TPAF 18A:66-19 and 25; PFRS 43:16A-16; PERS 43:15A-25 and 33) is credited with all contributions made by active members of the Plans. Interest earned on member contributions is credited to the Accumulative Interest Reserve, which is applied to JRS, TPAF and PERS. Member withdrawals are paid out of these reserves.

Contingent Reserve – JRS (\$-50,115,102); SPRS (\$1,541,558,486); TPAF (\$-32,549,614,092); PERS (\$-18,308,491,933)

The Contingent Reserve (NJSA: JRS 43:6A-33; SPRS 53:5A-34; TPAF 18A:66-18; PERS 43:15A-24) is credited with the contributions of contributing employers. Interest earnings, after crediting the Accumulative Interest Reserve and Retirement Reserve, as required, are credited to this account. Additionally, payments for administrative and miscellaneous expenses are made from this reserve.

Retirement Reserve – JRS (\$127,140,766); SPRS (\$347,271,849); TPAF (\$43,194,563,153); PFRS (\$30,433,730,661); PERS (\$37,124,372,776)

The Retirement Reserve (NJSA: JRS 43:6A-34; SPRS 53:5A-36; TPAF 18A:66-21; PFRS 43:16A-16; PERS 43:15A-27) is the account from which retirement benefits including COLA adjustments are paid. Upon retirement of a member, accumulated contributions together with accumulated interest are transferred to the Retirement Reserve from the Members' Annuity Savings Reserve and Accumulative Interest Reserve. Any additional reserves needed to fund the balance of the retirement benefit are transferred from the Contingent Reserve or Pension Accumulation Reserve. Annually, interest as determined by the State Treasurer (7.3% for State fiscal year 2021) is credited to the Retirement Reserve.

Retirement Reserve – POPF (\$5,136,044)

The Retirement Reserve (NJSA: POPF 43:7-13) is credited with State of New Jersey contributions and investment income. In addition, all benefits are paid from this account.

Non-Contributory Group Insurance Premium Reserve – PFRS – Local (\$57,887,220); PERS – Local (\$72,999,722)

The Non-Contributory Group Insurance Premium Reserve (NJSA: PFRS 43:16A-56; PERS 43:15A-91) represents the accumulation of employer group life insurance contributions in excess of premiums disbursed to the insurance carrier since the inception of the noncontributory death benefit program plus reserves held by the insurance carrier. Members are eligible by statute for the noncontributory group life insurance plan in the first year of membership. TPAF, PFRS – State and PERS – State show no balance as these premium expenses are funded on a monthly basis.

Notes to Financial Statements
June 30, 2021

Pension Accumulation Reserve – PFRS (\$-1,132,828,590)

The Pension Accumulation Reserve (NJSA: PFRS 43:16A-16) is credited with the contributions of the State of New Jersey and other employers. Interest earnings, after crediting the Retirement Reserve, as required, are credited to this account. Additionally, payments for administrative and miscellaneous expenses are made from this Reserve.

Pension Reserve - CPFPF (\$2,185,465)

The Pension Reserve (NJSA: CPFPF 43:16-5) is credited with State of New Jersey contributions and investment income.

Benefit Enhancement Reserve – PERS – Local (\$12,983,598)

The Benefit Enhancement Reserve (NJSA: 43:15A-22) is a special reserve from which the required normal contributions to provide benefit increases under P.L. 2001, C. 353 and P.L. 2001, C. 133 will be charged. The reserve was established in 2002 and credited with excess assets equivalent to member contributions for State fiscal years 2000 and 2001 by transferring reserves in the Contingent Reserve to the Benefit Enhancement Reserve. Additional transfers will be made, as required, to maintain a reserve balance equal to the present value of expected additional normal contributions due to the increased benefits.

SHBP Reserve Fund – Local - Retired (\$50,271,652)

The net position of SHBP – Local (NJSA: SHBP 52:14-17.42) is available to pay claims of future periods. These reserves are maintained by the fund to stabilize rates and to meet unexpected increase in claims.

Variable Accumulation Reserve – NJSEDCP (\$5,766,062,019); SACT (\$251,143,229)

The Variable Accumulation Reserve (NJSA: NJSEDCP 52:18A-164; SACT 52:18A-109) is credited with member contributions and interest earnings on those contributions. Payments for administrative and miscellaneous expense are made from this reserve.

Variable Benefits Reserve – SACT (\$63,996,331)

The Variable Benefits Reserve (NJSA: SACT 52:18A-109) represents contributions accumulations that are transferred to Annuity Benefits for retirees that are receiving monthly life annuity payments.

The State has not made the full actuarial required contribution to the defined benefit pension plans over the past several years resulting in a negative fund balance in certain reserves. However, the defined benefit

Notes to Financial Statements
June 30, 2021

pension plans have sufficient net position to make benefit payments as they become due and the State has started making its full actuarial required contribution in fiscal year 2022.

Various reserve balances as of June 30, 2021 are as follows:

	Pension Reserves	Postemployment Benefit Plan Reserves
Members' Annuity Savings Reserve and Accumulated		
Interest Reserve	\$ 37,231,225,743	
Contingent Reserve	(49,366,662,641)	
Retirement Reserve	111,232,215,249	
Non-Contributory Group Insurance Premium Reserve	130,886,942	_
Pension Accumulation Reserve	(1,132,828,590)	_
Pension Reserve	2,185,465	_
Benefit Enhancement Reserve	12,983,598	_
SHBP Reserve		50,271,652
Variable Accumulation Reserve	6,017,205,248	_
Variable Benefits Reserve	63,996,331	
Total	\$ 104,191,207,345	50,271,652

(11) Contingencies

The Division is a party to various legal actions arising in the ordinary course of its operations. While it is not feasible to predict the ultimate outcome of these actions, it is the opinion of management that the resolution of these matters will not have a material adverse effect on the Division's financial statements.

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios - Defined Benefit Pension Plans

Judicial Retirement System

(Unaudited)

June 30, 2021

	_	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability: Service cost Interest on total pension liability Effect of economic/demographic (gains) or losses Effect of assumptions changes or inputs Transfers from other systems Benefit payments	\$	51,347,166 39,537,147 (1,657,542) (402,501,116) — (62,705,183)	43,552,248 45,751,351 2,816,229 112,739,048 1,025,802 (60,949,109)	37,584,273 38,067,870 19,557,727 151,274,804 1,310,118 (59,591,606)	35,477,981 36,209,627 (8,553,096) (23,084,707) 2,859,841 (58,286,421)	37,224,230 30,788,977 14,120,673 (70,235,370) 1,121,097 (56,365,718)	33,333,864 36,471,524 254,822 85,677,552 726,284 (54,686,521)	30,702,986 41,473,055 (1,733,197) (41,873,530) 2,081,523 (52,430,016)	32,123,341 40,332,123 — 26,907,821 — (49,604,080)
Net change in total pension liability		(375,979,528)	144,935,569	188,203,186	(15,376,775)	(43,346,111)	101,777,525	(21,779,179)	49,759,205
Total pension liability-beginning	_	1,255,157,975	1,110,222,406	922,019,220	937,395,995	980,742,106	878,964,581	900,743,760	850,984,555
Total pension liability-ending (a)	\$_	879,178,447	1,255,157,975	1,110,222,406	922,019,220	937,395,995	980,742,106	878,964,581	900,743,760
Plan fiduciary net position: Contributions-employer Contributions-employee Net investment (loss) income Net transfers from other systems Benefit payments, including refunds of employee contributions Administrative expense	\$	52,508,011 9,426,354 37,225,810 — (62,705,183) (324,080)	37,496,113 9,239,505 1,972,315 1,025,802 (60,949,109) (219,976)	29,702,700 9,688,270 9,230,701 1,310,118 (59,591,606) (200,338)	24,023,637 9,177,453 14,809,869 2,859,841 (58,286,421) (185,364)	20,341,379 10,348,191 20,031,152 1,121,097 (56,365,718) (150,588)	14,794,774 9,271,869 (2,721,949) 726,284 (54,686,521) (168,008)	17,031,026 6,310,124 8,475,641 2,081,523 (52,430,016) (168,762)	15,874,857 5,096,577 34,448,036 — (49,604,080) (162,372)
Net change in Plan fiduciary net position		36,130,912	(11,435,350)	(9,860,155)	(7,600,985)	(4,674,487)	(32,783,551)	(18,700,464)	5,653,018
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)	_	146,428,843 182,559,755	157,864,193 146,428,843	167,724,348 157,864,193	175,325,333 167,724,348	179,999,820 175,325,333	212,783,371 179,999,820	231,483,835 212,783,371	225,830,817 231,483,835
Plan's net pension liability-ending (a)-(b)	\$ _	696,618,692	1,108,729,132	952,358,213	754,294,872	762,070,662	800,742,286	666,181,210	669,259,925
Plan fiduciary net position as a percentage of the total pension liability		20.76%	11.67%	14.22%	18.19%	18.70%	18.35%	24.21%	25.70%
Covered-employee payroll Net pension liability as a percentage of covered-employee payroll	\$	76,970,450 905.05%	76,627,036 1,446.92%	77,763,777 1,224.68%	69,216,709 1,089.76%	68,062,584 1,119.66%	67,097,166 1,193.41%	66,028,491 1,008.93%	67,810,110 986.96%

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

Notes to Schedule:

Changes in benefit terms:	None							
Changes in assumptions:								
Discount rate	7.00%	3.10%	4.07%	4.09%	3.83%	3.11%	4.12%	4.58%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2021, the Scale MP-2021 was used for mortality improvement; for 2020, the Scale MP-2020.

See accompanying independent auditors' report.

For 2019, the assumed rates of retirement, mortality, salary increases, and inflation were updated based on the July 1, 2014 - June 30, 2018 Experience Study. For healthy retiree and pre-retirement mortality, the Pub-2010 Teachers Above-Median Income Employee mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis was used. For disabled retiree mortality, the Pub-2010 Non-Safety Disabled Retiree mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis was used. For 2019 mortality improvement, Scale MP-2019 was used.

For 2016, salary increases were assumed to increase 2.00% through fiscal year 2025 and 3.00% for each fiscal year thereafter.

For 2015, the demographic assumptions were revised to reflect those recommended on the basis of the July 1, 2011 - June 30, 2014 experience study.

Required Supplementary Information

Schedule of Changes in Net Pension Liability (Asset) and Related Ratios - Defined Benefit Pension Plans

Prison Officers' Pension Fund

(Unaudited)

June 30, 2021

	 2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability: Service cost Interest on total pension liability Effect of economic/demographic (gains) or losses Effect of assumptions changes or inputs Benefit payments	\$ 81,970 34,727 23,594 (642,747)	152,968 (339,022) 204,867 (715,168)	188,032 127,146 (36,496) (816,972)	215,068 (407,471) (73,662) (947,877)	198,788 82,047 (240,233) (1,069,209)		331,362 (296,620) 163,490 (1,377,505)	401,659 — 129,449 (1,583,408)
Net change in total pension liability	 (502,456)	(696,355)	(538,290)	(1,213,942)	(1,028,607)	279,557	(1,179,273)	(1,052,300)
Total pension liability-beginning	 4,028,676	4,725,031	5,263,321	6,477,263	7,505,870	7,226,313	8,405,586	9,457,886
Total pension liability-ending (a)	\$ 3,526,220	4,028,676	4,725,031	5,263,321	6,477,263	7,505,870	7,226,313	8,405,586
Plan fiduciary net position: Contributions-other Net investment income Benefit payments, including refunds of employee contributions Administrative expense	\$ 330,028 5,903 (642,747) (3,429)	361,956 74,920 (715,168) (4,628)	412,250 111,413 (816,972) (4,215)	484,565 70,215 (947,877) (4,315)	552,131 30,847 (1,069,209) (4,134)	634,217 18,067 (1,240,307) (5,312)	698,360 6,355 (1,377,505) (5,843)	793,174 7,368 (1,583,408) (5,853)
Net change in Plan fiduciary net position	(310,245)	(282,920)	(297,524)	(397,412)	(490,365)	(593,335)	(678,633)	(788,719)
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)	 5,446,289 5,136,044	4,925,932 4,643,012	5,223,456 4,925,932	5,620,868 5,223,456	6,111,233 5,620,868	6,704,568 6,111,233	7,383,201 6,704,568	8,171,920 7,383,201
Plan's net pension liability (asset)-ending (a)-(b)	\$ (1,609,824)	(614,336)	(200,901)	39,865	856,395	1,394,637	521,745	1,022,385
Plan fiduciary net position as a percentage of the total pension liability (asset)	145.65%	115.25%	104.25%	99.24%	86.78%	81.42%	92.78%	87.84%
Covered-employee payroll Net pension liability (asset) as a percentage of covered-employee payroll	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A

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

Notes to Schedule:

Changes in benefit terms: None

 Changes in assumptions:
 Discount rate
 2.16%
 2.21%
 3.50%
 3.87%
 3.58%
 2.85%
 3.80%
 4.29%

Adjustment to 2021 Plan fiduciary net position-beginning (July 1, 2020)

During fiscal year 2021, the Division adopted GASB Statement No. 84, Fiduciary Activities, which resulted in the recognition of historical activity of the legacy Pension Adjustment Fund respective to POPF being recognized as an adjustment to the plan fiduciary net position-beginning.

See accompanying independent auditors' report.

For 2021, the Scale MP-2021 was used for mortality improvement; for 2020, the Scale MP-2020.

For 2019, the mortality tables used were the Pub-2010 Safety Healthy Retiree, Pub-2010 General Healthy Retiree, Pub-2010 Safety Disabled Retiree for healthy retirees, beneficiaries, and disabled retirees, respectively. Each used a base year of 2010 with future improvement from the base year on a generational basis using Scale MP-2019.

For 2016, the mortality improvement assumption was revised to be projected on a generational basis from the base year of 2000 to 2014 using Projection Scale BB as the base tables and further projected beyond the valuation date using the plan actuary's modified 2014 projection. Further, the RP-2000 disabled retiree mortality table is used for the period after disability retirement for disability retirements.

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios - Defined Benefit Pension Plans

State Police Retirement System

(Unaudited)

June 30, 2021

	_	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability: Service cost	\$	106.016.397	92.264.920	100.705.109	119.718.797	139.506.057	113.546.510	93.740.921	93.623.020
Interest on total pension liability Effect of economic/demographic (gains) or losses	Ť	251,694,211 3.828.967	253,377,036 6,595,373	240,494,663 (11,528,958)	226,928,605 (19,592,172)	202,545,532 23,786,696	221,675,495 (17,580,385)	216,980,562 35,245,543	209,010,706
Effect of assumptions changes or inputs Transfers from other systems		(1,109,430,087) 530,473	303,378,361 305,306	(333,811,404) (39,834)	(379,490,284) 190,903	(697,970,471) 3,925	747,941,075 54,000	435,691,094 222,557	92,686,900
Benefit payments	_	(237,959,841)	(230,638,032)	(225,682,230)	(222,315,723)	(217,303,946)	(213,436,150)	(206,493,624)	(197,958,938)
Net change in total pension liability		(985,319,880)	425,282,964	(229,862,654)	(274,559,874)	(549,432,207)	852,200,545	575,387,053	197,361,688
Total pension liability-beginning	_	5,045,134,550	4,619,851,586	4,849,714,240	5,124,274,114	5,673,706,321	4,821,505,776	4,246,118,723	4,048,757,035
Total pension liability-ending (a)	\$ _	4,059,814,670	5,045,134,550	4,619,851,586	4,849,714,240	5,124,274,114	5,673,706,321	4,821,505,776	4,246,118,723
Plan fiduciary net position:									
Contributions-employer	\$	141,212,825	117,911,260	98,182,956	74,603,780	53,006,614	37,435,541	38,527,297	36,436,923
Contributions-employee Net investment (loss) income		27,268,772 477,604,855	24,292,258 24,733,948	24,183,990 105,696,140	22,416,571 154,029,009	23,721,785 207,401,590	22,818,295 (19,284,054)	22,315,431 75,532,779	24,034,496 287,098,217
Net transfers from other systems		530,473	305,306	(39,834)	190,903	3,925	54,000	222,557	207,090,217
Benefit payments, including refunds of employee contributions		(237,959,841)	(230,638,032)	(225,682,230)	(222,315,723)	(217,303,946)	(213,436,150)	(206,493,624)	(197,958,938)
Administrative expense	_	(494,765)	(632,762)	(596,137)	(377,193)	(294,745)	(334,630)	(351,724)	(280,026)
Net change in Plan fiduciary net position		408,162,319	(64,028,022)	1,744,885	28,547,347	66,535,223	(172,746,998)	(70,247,284)	149,330,672
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)	_	1,727,761,545 2,135,923,864	1,791,789,567 1,727,761,545	1,790,044,682 1,791,789,567	1,761,497,335 1,790,044,682	1,694,962,112 1,761,497,335	1,867,709,110 1,694,962,112	1,937,956,394 1,867,709,110	1,788,625,722 1,937,956,394
Plan's net pension liability-ending (a)-(b)	\$_	1,923,890,806	3,317,373,005	2,828,062,019	3,059,669,558	3,362,776,779	3,978,744,209	2,953,796,666	2,308,162,329
Plan fiduciary net position as a percentage of the total pension liability	_	52.61%	34.25%	38.78%	36.91%	34.38%	29.87%	38.74%	45.64%
Covered-employee payroll Net pension liability as a percentage of covered-employee payroll	\$	298,254,514 645.05%	296,189,926 1,120.02%	275,790,087 1,025.44%	284,707,387 1,074.67%	277,771,135 1,210.63%	275,477,457 1,444.31%	262,496,289 1,125.27%	262,063,829 880.76%

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

Notes to Schedule:

Changes in benefit terms: None Changes in assumptions: Discount rate 7.00% 5.00% 5.51% 4.97% 4.42% 3.55% 4.59% 5.12% Long-term expected rate of return 7.00% 7.00% 7.00% 7.00% 7.00% 7.65% 7.90% 7.90%

For 2021, the Scale MP-2021 was used for mortality improvement: for 2020, the Scale MP-2020.

For 2019, the assumed rates of retirement, mortality, salary increases, and inflation were updated based on the July 1, 2014 - June 30, 2018 Experience Study. For healthy retiree and pre-retirement mortality, the Pub-2010 Public Safety Above-Median Income Employee mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis was used. For beneficiaries, the Pub-2010 General Above-Median Income Healthy Retiree mortality table, unadjusted, with future improvement from the base year of 2010 was used. For disabled retiree mortality, the Pub-2010 Public Safety Disabled Retiree mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis was used. For 2019 mortality improvement, Scale MP-2019 was used.

For 2016, salary increases were assumed to increased 2.95% through fiscal year 2025 and 3.95% for each fiscal year thereafter.

For 2015, the demographic assumptions were revised to reflect those recommended on the basis of the July 1, 2011 - June 30, 2014 experience study.

See accompanying independent auditors' report.

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios - Defined Benefit Pension Plans

Consolidated Police and Firemen's Pension Fund

(Unaudited)

June 30, 2021

		2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability: Service cost	¢								
Interest on total pension liability Effect of economic/demographic (gains) or losses Effect of assumptions changes or inputs Benefit payments	ъ 	67,565 105,481 18,418 (702,399)	134,753 (277,515) 147,999 (889,923)	200,618 (196,476) (375,356) (1,033,175)	241,913 (582,507) (70,518) (1,289,899)	260,211 (984,588) (236,022) (1,535,623)	352,889 (71,313) 1,273,909 (1,881,252)	504,066 (993,528) 193,719 (2,445,627)	632,080 — 163,528 (2,942,035)
Net change in total pension liability		(510,935)	(884,686)	(1,404,389)	(1,701,011)	(2,496,022)	(325,767)	(2,741,370)	(2,146,427)
Total pension liability-beginning		3,406,527	4,291,213	5,695,602	7,396,613	9,892,635	10,218,402	12,959,772	15,106,199
Total pension liability-ending (a)	\$	2,895,592	3,406,527	4,291,213	5,695,602	7,396,613	9,892,635	10,218,402	12,959,772
Plan fiduciary net position: Contributions-nonemployer Net investment income Contributions-other Benefit payments, including refunds of employee contributions Administrative expense	\$	248,000 5,956 441,879 (702,399) (2,620)	17,129 541,279 (889,923) (3,308)	28,518 631,757 (1,033,175) (3,013)	325,000 21,542 806,330 (1,289,899) (4,006)	575,000 10,099 964,280 (1,535,623) (4,188)	148,000 10,856 1,196,017 (1,881,252) (6,643)		11,740 585 1,889,091 (2,942,035) (9,566)
Net change in Plan fiduciary net position		(9,184)	(334,823)	(375,913)	(141,033)	9,568	(533,022)	(875,681)	(1,050,185)
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)	_	2,194,649 2,185,465	1,387,550 1,052,727	1,763,463 1,387,550	1,904,496 1,763,463	1,894,928 1,904,496	2,427,950 1,894,928	3,303,631 2,427,950	4,353,816 3,303,631
Plan's net pension liability-ending (a)-(b)	\$	710,127	2,353,800	2,903,663	3,932,139	5,492,117	7,997,707	7,790,452	9,656,141
Plan fiduciary net position as a percentage of the total pension liability		75.48%	30.90%	32.33%	30.96%	25.75%	19.15%	23.76%	25.49%
Covered-employee payroll Net pension liability as a percentage of covered-employee payroll		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A

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

Notes to Schedule:

Changes in assumptions:

None

 Changes in assumptions:
 Discount rate
 2.16%
 2.21%
 3.50%
 3.87%
 3.58%
 2.85%
 3.80%
 4.29%

Adjustment to 2021 Plan fiduciary net position-beginning (July 1, 2020)

During fiscal year 2021, the Division adopted GASB Statement No. 84, Fiduciary Activities, which resulted in the recognition of historical activity of the legacy Pension Adjustment Fund respective to POPF being recognized as an adjustment to the plan fiduciary net position-beginning.

For 2021, the Scale MP-2021 was used for mortality improvement; for 2020, the Scale MP-2020.

For 2019, the mortality tables used were the Pub-2010 Public Safety Healthy Retiree and Pub-2010 General Healthy Retiree for healthy retirees and beneficiaries, respectively. Each used a base year of 2010 with future improvement from the base year on a generational basis using Scale MP-2019.

For 2016, the mortality improvement assumption was revised to be projected on a generational basis from the base year of 2000 to 2014 using Projection Scale BB as the base tables and further projected beyond the valuation date using the plan actuary's modified 2014 projection. Further, the RP-2000 disabled retiree mortality table is used for the period after disability retirement for disability retirements.

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios - Defined Benefit Pension Plans

Teachers' Pension and Annuity Fund

(Unaudited)

June 30, 2021

	_	2021	2020	2019	2018	2017	2016	2015	2014			
Total pension liability: Service cost Interest on total pension liability Changes of benefit terms Effect of economic/demographic (gains) or losses Effect of assumptions changes or inputs Transfers from other systems Benefit payments	\$	1,759,507,848 4,695,758,765 — 195,943,171 (14,765,458,197) 1,287,750 (4,710,584,326)	1,643,902,335 4,680,942,056 (16,738,469) (8,596,840) 1,613,054,603 9,417,333 (4,615,149,051)	1,882,081,572 4,201,672,382 — (155,621,840) (4,005,548,119) 6,655,677 (4,510,860,239)	2,229,422,113 3,858,188,355 — 1,195,858,381 (6,816,855,725) 5,686,293 (4,401,203,131)	3,028,689,581 3,304,988,177 — 236,377,556 (13,285,524,000) 1,338,431 (4,306,268,745)	2,344,321,810 3,694,844,118 — (134,644,168) 10,827,093,000 1,564,002 (4,169,070,762)	2,022,411,197 3,797,032,970 — 365,228,279 5,913,556,000 4,117,141 (4,015,003,587)	1,870,901,832 3,794,362,523 — (24,898,221) 2,614,173,709 — (3,837,859,513)			
Net change in total pension liability	_	(12,823,544,989)	3,306,831,967	(2,581,620,567)	(3,928,903,714)	(11,020,399,000)	12,564,108,000	8,087,342,000	4,416,680,330			
Total pension liability-beginning		87,522,678,686	84,215,846,719	86,797,467,286	90,726,371,000	101,746,770,000	89,182,662,000	81,095,320,000	76,678,639,670			
Total pension liability-ending (a)	\$	74,699,133,697	87,522,678,686	84,215,846,719	86,797,467,286	90,726,371,000	101,746,770,000	89,182,662,000	81,095,320,000			
Plan fiduciary net position: Contributions-employer Contributions-nonemployer Contributions-employee Net investment (loss) income Net transfers from other systems Employer specific contributions - delayed appropriation and delayed enrollments Benefit payments, including refunds of employee contributions	\$	2,684,911 2,933,363,049 883,659,076 5,902,191,421 1,287,750 403,226 (4,710,584,326)	2,109,340 2,268,898,389 867,037,595 318,393,101 9,417,333 329,570 (4,615,149,051)	2,050,414 2,013,446,234 846,166,328 1,361,781,295 6,655,677 300,112 (4,510,860,239)	1,723,827 1,514,407,623 810,899,751 2,016,316,929 5,686,293 345,897 (4,401,203,131)	1,404,292 1,125,614,188 790,788,033 2,736,988,791 1,338,431 357,659 (4,306,268,745)	1,105,810 798,963,467 761,711,695 (267,684,353) 1,564,002 243,660 (4,169,070,762)	807,246 539,796,289 740,296,265 1,066,062,926 4,117,141 358,899 (4,015,003,587)	4,688,045 423,012,101 716,183,306 4,100,273,453 — — (3,837,859,513)			
Administrative expense	_	(9,042,590)	(18,590,555)	(13,922,385)	(13,222,178)	(11,923,787)	(13,768,112)	(13,890,080)	(12,170,971)			
Net change in Plan fiduciary net position		5,003,962,517	(1,167,554,278)	(294,382,564)	(65,044,989)	338,298,862	(2,886,934,593)	(1,677,454,901)	1,394,126,421			
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)	_	21,529,179,998 26,533,142,515	22,696,734,276 21,529,179,998	22,991,116,840 22,696,734,276	23,056,161,829 22,991,116,840	22,717,862,967 23,056,161,829	25,604,797,560 22,717,862,967	27,282,252,461 25,604,797,560	25,888,126,040 27,282,252,461			
Plan's net pension liability-ending (a)-(b)	\$	48,165,991,182	65,993,498,688	61,519,112,443	63,806,350,446	67,670,209,171	79,028,907,033	63,577,864,440	53,813,067,539			
Plan fiduciary net position as a percentage of the total pension liability		35.52%	24.60%	26.95%	26.49%	25.41%	22.33%	28.71%	33.64%			
Covered-employee payroll Net pension liability as a percentage of covered-employee payroll	\$	11,338,928,538 424.78%	11,061,603,138 596.60%	10,823,504,797 568.38%	10,636,814,121 599.86%	10,436,205,103 648.42%	10,305,472,484 766.86%	10,162,263,470 625.63%	10,038,792,896 536.05%			
	Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.											

5.40%

7.00%

5.60%

60

4.86%

7.00%

Notes to Schedule:

Changes in benefit terms:

Changes in assumptions:

Discount rate

The Division of Pensions and Benefits adopted a new policy regarding the crediting of interest on member contributions for the purpose of refund of accumulated deductions. Previously, after termination of employment, but prior to retirement or death, interest was credited on member accumulated deductions at the valuation interest rate for the entire period. Effective July 1, 2018, interest is only credited at the valuation interest rate for the first two years of inactivity prior to retirement or death.

7.00%

7.00%

Long-term expected rate of return
For 2021, the Scale MP-2021 was used for mortality improvement; for 2020, the Scale MP-2020.

For 2019, the assumed rates of retirement, mortality, salary increases, and inflation were updated based on the July 1, 2015 - June 30, 2018 Experience Study. For pre-retirement mortality, the Pub-2010 Teachers Above-Median Income Employee mortality table with a 93.9% adjustment for males and 85.3% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For healthy retirees and beneficiaries, the Pub-2010 Teachers Above-Median Income Healthy Retiree mortality table with a 114.7% adjustment for males and 99.6% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For disabled retiree mortality, the Pub-2010 Non-Safety Disabled Retiree mortality table with a 106.3% adjustment for males, and a 100.3% adjustment for females, and with improvement from the base year of 2010 on a generational basis was used. For 2019 mortality improvement, Scale MP-2019 was used.

For 2016, the demographic assumptions were revised to reflect those recommended on the basis of the July 1, 2012 - June 30, 2015 experience study.

See accompanying independent auditors' report.

4.25%

7.00%

3.22%

4.13%

7.90%

4.68%

7.90%

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios - Defined Benefit Pension Plans

Police and Firemen's Retirement System

(Unaudited)

June 30, 2021

	_	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:									
Service cost Interest on total pension liability	\$	878,718,561 3,226,402,697	890,425,657 3,131,523,540	958,392,935 3,025,500,679	1,030,735,624 2,898,092,706	1,136,338,028 2,738,598,309	1,148,613,712 2,751,445,220	994,248,683 2,680,664,300	1,079,166,175 2,535,619,539
Change of benefit terms		147.434.341	3,131,323,340	3,023,300,079	2,090,092,700	2,730,390,309	2,751,445,220	2,060,004,300	2,555,619,559
Effect of economic/demographic (gains) or losses		(1,120,768,361)	67,509,143	(138, 356, 304)	47,676,088	89,364,940	(34,916,637)	(215,122,438)	_
Effect of assumptions changes or inputs Transfers from other systems		52,875,942 2.308.815	(892,759,358) 2,350,928	(1,875,170,696) 3,239,769	(2,069,626,924) 3,422,888	(3,534,553,975) 289,960	343,078,737 358,929	3,755,474,472 800,782	649,814,155
Benefit payments		(2,852,083,674)	(2,725,565,718)	(2,606,863,711)	(2,523,462,466)	(2,421,485,437)	(2,324,175,953)	(2,205,464,297)	(2,105,829,011)
Net change in total pension liability		334,888,321	473,484,192	(633,257,328)	(613,162,084)	(1,991,448,175)	1,884,404,008	5,010,601,502	2,158,770,858
Total pension liability-beginning	_	46,637,786,518	46,164,302,326	46,797,559,654	47,410,721,738	49,402,169,913	47,517,765,905	42,507,164,403	40,348,393,545
Total pension liability-ending (a)	\$_	46,972,674,839	46,637,786,518	46,164,302,326	46,797,559,654	47,410,721,738	49,402,169,913	47,517,765,905	42,507,164,403
Plan fiduciary net position:									
Contributions-employer	\$	1,442,270,056	1,352,498,105	1,206,535,544	1,127,617,114	1,002,043,734	900,033,567	883,776,917	858,047,628
Contributions-nonemployer		178,577,000	154,309,000	130,202,000	108,857,000	86,467,000	61,466,000	76,038,000	-
Contributions-employee		419,458,195	416,433,179	410,943,242	395,604,883	395,878,384	388,681,408	386,991,641	385,660,096
Net investment (loss) income Net transfers from other systems		6,952,727,005 2,308,815	425,543,356 2,350,928	1,549,138,833 3,239,769	2,139,481,226 3,422,888	2,791,104,860 289,960	(150,693,159) 358,929	922,598,676 800,782	3,381,553,869
Employer specific contributions - additional contribution		355.901	997.622	847.716	173.554	268,910	1.923.531	535.424	_
Employer specific contributions - additional contribution Employer specific contributions - delayed appropriation		966,820	603,835	422,890	450,244	892,514	763,176	865,936	_
Employer specific contributions - delayed enrollments		186,293	165,704	96.603	90.933	179,386	142,034	224.629	
Employer specific contributions - retroactive		4,652,327	5,230,213	6,501,177	3,120,240	11,476,881	3,661,101	24,536,440	_
Contributions-other		-,002,027	-		(12,230)		-		_
Benefit payments, including refunds of employee contributions		(2,852,083,674)	(2,725,565,718)	(2,606,863,711)	(2,523,462,466)	(2,421,485,437)	(2,324,175,953)	(2,205,464,297)	(2,105,829,011)
Administrative expense	_	(18,293,096)	(12,859,324)	(7,199,218)	(4,505,685)	(4,124,457)	(4,292,891)	(4,531,012)	(3,884,342)
Net change in Plan fiduciary net position		6,131,125,642	(380,293,100)	693,864,845	1,250,837,701	1,862,991,735	(1,122,132,257)	86,373,136	2,515,548,240
Plan fiduciary net position-beginning		27,412,127,845	27,792,420,945	27,098,556,100	25,847,718,399	23,984,726,664	25,106,858,921	25,020,485,785	22,504,937,545
Plan fiduciary net position-ending (b)	_	33,543,253,487	27,412,127,845	27,792,420,945	27,098,556,100	25,847,718,399	23,984,726,664	25,106,858,921	25,020,485,785
Plan's net pension liability-ending (a)-(b)	\$	13,429,421,352	19,225,658,673	18,371,881,381	19,699,003,554	21,563,003,339	25,417,443,249	22,410,906,984	17,486,678,618
Plan fiduciary net position as a percentage of the total pension liability		71.41%	58.78%	60.20%	57.91%	54.52%	48.55%	52.84%	58.86%
Covered-employee payroll	\$	4,142,905,791	3,937,977,209	3,870,718,707	3,803,348,329	3,726,807,562	3,695,509,355	3,682,677,356	3,678,910,266
Net pension liability as a percentage of covered-employee payroll		324.15%	488.21%	474.64%	517.94%	578.59%	687.79%	608.55%	475.32%

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

Notes to Schedule:

Changes in benefit terms:

Plan amendments reflected: The early retirement window per State Assembly bill S107; the extended eligibility of the accidental death benefit in Assembly bill 1660

Changes in assumptions:								
Discount rate	7.00%	7.00%	6.85%	6.51%	6.14%	5.55%	5.79%	6.32%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2021, the Scale MP-2021 was used for mortality improvement; for 2020, the Scale MP-2020

For 2019, the assumed rates of retirement, mortality, salary increases, and inflation were updated based on the July 1, 2013 - June 30, 2018 Experience Study. For pre-retirement mortality, the Pub-201C Safety Employee mortality table with a 105.6% adjustment for males and 102.5% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For healthy retirees, the Pub-201O Safety Retiree Below-Median Income Weighted mortality table with a 96.7% adjustment for males and 96.0% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For beneficiaries mortality, the Pub-201O General Retiree Below-Median Income Weighted mortality table, unadjusted, and with future improvement from the base year of 2010 on a generational basis was used. For disabled mortality, the Pub-201O Safety Disabled Retiree mortality table with a 152.0% adjustment for males and 109.3% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For 2019 mortality improvement, Scale MP-2019 was used

For 2016, the mortality improvement scale incorporated the plan actuary's modified 2014 projection scale. Further, salary increases were assumed to increase between 2.10% and 8.98% (based on age) trough fiscal year 2026 and 3.10% and 9.98% (based on age) for each fiscal year thereafter. For 2015, demographic assumptions were revised in accordance with the results of the July 1, 2010 June 30, 2013 experience study.

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios - Defined Benefit Pension Plans

Public Employees' Retirement System

(Unaudited)

June 30, 2021

	_	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability: Service cost Interest on total pension liability Changes of benefit terms	\$	1,134,836,940 4,666,037,367 8,488,231	1,298,089,823 4,408,636,380 (27,350,963)	1,330,518,589 4,084,253,310	1,555,424,045 3,849,650,265	1,865,398,219 3,412,789,012	1,628,065,678 3,653,373,426	1,523,631,386 3,647,688,354	1,592,214,831 3,506,486,225
Changes of benefit terms Effect of economic/demographic (gains) or losses Effect of assumptions changes or inputs Transfers from other systems Benefit payments		0,466,231 103,617,038 131,461,485 (4,754,619) (4,434,554,694)	799,902,851 (5,511,377,388) (14,123,679) (4,253,053,912)	137,159,950 (3,283,548,860) (11,955,594) (4,118,371,422)	(363,908,216) (5,613,718,254) (13,217,000) (3,936,320,575)	306,941,390 (10,156,789,076) 854,976 (3,810,818,692)	600,806,505 8,792,817,065 778,753 (3,629,651,915)	1,050,795,158 4,091,557,460 1,651,542 (3,441,046,065)	1,222,437,554 ———————————————————————————————————
Net change in total pension liability		1,605,131,748	(3,299,276,888)	(1,861,944,027)	(4,522,089,735)	(8,381,624,171)	11,046,189,512	6,874,277,835	3,061,848,496
Total pension liability-beginning		67,704,953,253	71,004,230,141	72,866,174,168	77,388,263,903	85,769,888,074	74,723,698,562	67,849,420,727	64,787,572,231
Total pension liability-ending (a)	\$	69,310,085,001	67,704,953,253	71,004,230,141	72,866,174,168	77,388,263,903	85,769,888,074	74,723,698,562	67,849,420,727
Plan fiduciary net position: Contributions-employer Contributions-nonemployer	\$	2,477,308,520 13,079,912	2,108,766,760 8,117,299	1,862,706,649 6,829,134	1,680,631,409	1,465,931,579	1,273,425,342	1,085,237,214	917,689,000
Contributions-employee Net investment (loss) income Net transfers from other systems Employer specific contributions - additional contribution		909,939,594 7,708,453,890 (4,754,619) 93,521	908,936,226 456,271,235 (14,123,679) 102,853	909,191,554 1,741,296,887 (11,955,594) 103,872	854,178,790 2,435,763,559 (13,217,000) 28,566	847,952,137 3,202,393,837 854,976 25,676	821,305,787 (237,215,643) 778,753 257,850	805,232,235 1,117,827,113 1,651,542 111,824	797,818,225 4,102,964,869 —
Employer specific contributions - delayed appropriation Employer specific contributions - delayed enrollments Employer specific contributions - retroactive Contributions - other		2,411,251 740,098 3,838,038	(4,146,446) 567,434 5,318,876	1,775,826 657,701 4,623,577 2,387	2,687,967 931,611 4,818,841	3,224,612 1,030,774 11,230,521	1,721,199 532,612 687,225	1,664,415 594,843 6,504,878	_ _ _
Contributions - other Benefit payments, including refunds of employee contributions Administrative expense	_	(4,434,554,694) (14,120,177)	(4,253,053,912) (19,365,010)	(4,118,371,422) (21,257,441)	(3,936,320,575) (21,368,150)	(7,797) (3,810,818,692) (19,648,715)	(51,586) (3,629,651,915) (23,285,920)	(31,006) (3,441,046,065) (23,761,860)	(3,259,290,114) (21,756,019)
Net change in Plan fiduciary net position		6,662,435,334	(802,608,364)	375,603,130	1,008,135,018	1,702,168,908	(1,791,496,296)	(446,014,867)	2,537,425,961
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)		29,045,369,302 35,707,804,636	29,847,977,666 29,045,369,302	29,472,374,536 29,847,977,666	28,464,239,518 29,472,374,536	26,762,070,610 28,464,239,518	28,553,566,906 26,762,070,610	28,999,581,773 28,553,566,906	26,462,155,812 28,999,581,773
Plan's net pension liability-ending (a)-(b)	\$:	33,602,280,365	38,659,583,951	41,156,252,475	43,393,799,632	48,924,024,385	59,007,817,464	46,170,131,656	38,849,838,954
Plan fiduciary net position as a percentage of the total pension liability		51.52%	42.90%	42.04%	40.45%	36.78%	31.20%	38.21%	42.74%
Covered-employee payroll Net pension liability as a percentage of covered-employee payroll	\$	11,965,922,552 280.82%	11,775,149,674 328.32%	11,440,021,762 359.76%	11,360,644,671 381.97%	11,296,345,312 433.10%	11,320,198,747 521.26%	11,441,433,226 403.53%	11,448,531,265 339.34%

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

Notes to Schedule:

Changes in benefit terms:

The Division of Pensions and Benefits adopted a new policy regarding the crediting of interest on member contributions for the purpose of refund of accumulated deductions. Previously, after termination of employment, but prior to retirement or death, interest was credited on member accumulated deductions at the valuation interest rate for the entire period. Effective July 1, 2018, interest is only credited at the valuation interest rate for the first two years of inactivity prior to retirement or death.

Changes in assumptions: Discount rate 7.00% 7.00% 6.28% 5.66% 5.00% 3.98% 4 90% 5.39% 7 00% 7.00% 7.65% 7.90% 7 90% 7 00% 7.00% 7 00%

For 2021, the Scale MP-2021 was used for mortality improvement; for 2020, the Scale MP-2020.

For 2019, the assumed rates of retirement, mortality, salary increases, and inflation were updated based on the July 1, 2014 - June 30, 2018 Experience Study. For pre-retirement mortality, the Pub-2010 General Below-Median Income Employee mortality table with a 82.2% adjustment for males and 101.4% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For healthy retirees and beneficiaries, the Pub-2010 General Below-Median Income Healthy Retiree mortality table with a 91.4% adjustment for males and 97.7% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For disabled retiree mortality, the Pub-2010 Non-Safety Disabled Retiree mortality table with a 127.7% adjustment for males, and a 117.2% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For 2019 mortality improvement, Scale MP-2019 was used.

For 2016, demographic assumptions were revised in accordance with the results of the July 1, 2011 - June 30, 2014 experience study and the mortality improvement scale incorporated the plan actuary's modified MP-2014 projection scale. Further, salary increases were assumed to increase between 1.65% and 4.15% (based on age) through fiscal year 2026 and 2.65% and 5.15% (based on age) for each fiscal year thereafter

Required Supplementary Information

Schedule of Employer Contributions - Defined Benefit Pension Plans (Unaudited)

Year ended June 30: 2021 \$ 66,973,041 52,508,011 (14,465,030) 76,970,450 68.22% 2020 53,213,618 37,496,113 (15,717,505) 76,627,036 48.93 2019 49,099,041 29,702,700 (19,396,341) 77,763,777 38.20 2018 47,224,943 24,023,637 (23,201,306) 69,216,709 34.71 2017 44,807,771 20,341,379 (24,466,392) 68,062,584 29.89 2016 47,305,819 14,794,774 (32,511,045) 67,097,166 22.05 2015 45,136,504 17,031,026 (28,105,478) 66,028,491 25.79 2014 43,922,167 15,874,681 (28,047,486) 67,810,110 23.41 2013 45,415,467 12,308,227 (33,107,240) 67,497,660 18.24 2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Year ended June 30: 2021 \$ — — N/A N/A 2019 — — N/A N/A 2018 — — N/A N/A 2018 — — N/A N/A 2017 — — N/A N/A 2016		Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
2021 \$ 66,973,041 52,508,011 (14,465,030) 76,970,450 68.22% 2020 53,213,618 37,496,113 (15,717,505) 76,627,036 48.93 2019 49,099,041 29,702,700 (19,396,341) 77,763,777 38.20 2018 47,224,943 24,023,637 (23,201,306) 69,216,709 34.71 2017 44,807,771 20,341,379 (24,466,392) 68,062,584 29.89 2016 47,305,819 14,794,774 (32,511,045) 67,097,166 22.05 2015 45,136,504 17,031,026 (28,105,478) 66,028,491 25.79 2014 43,922,167 15,874,681 (28,047,486) 67,810,110 23.41 2013 45,415,467 12,308,227 (33,107,240) 67,497,660 18.24 2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund			Judicial Reti	rement System		
2020	Year ended June	30:				
2019	2021 \$	66,973,041	52,508,011	(14,465,030)	76,970,450	68.22%
2018	2020	53,213,618	37,496,113	(15,717,505)	76,627,036	48.93
2017 44,807,771 20,341,379 (24,466,392) 68,062,584 29.89 2016 47,305,819 14,794,774 (32,511,045) 67,097,166 22.05 2015 45,136,504 17,031,026 (28,105,478) 66,028,491 25.79 2014 43,922,167 15,874,681 (28,047,486) 67,810,110 23.41 2013 45,415,467 12,308,227 (33,107,240) 67,497,660 18.24 2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund Year ended June 30: 2021 \$ — — N/A N/A 2020 — — N/A N/A 2019 — — N/A N/A 2018 — — N/A N/A 2016 — — N/A N/A N/A N/A	2019	49,099,041	29,702,700	(19,396,341)	77,763,777	38.20
2016 47,305,819 14,794,774 (32,511,045) 67,097,166 22.05 2015 45,136,504 17,031,026 (28,105,478) 66,028,491 25.79 2014 43,922,167 15,874,681 (28,047,486) 67,810,110 23.41 2013 45,415,467 12,308,227 (33,107,240) 67,497,660 18.24 2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund Year ended June 30: 2021 \$ — — N/A N/A 2020 — — N/A N/A 2019 — — N/A N/A 2018 — — N/A N/A 2017 — — — N/A N/A 2016 — — — N/A N/A	2018	47,224,943	24,023,637	(23,201,306)	69,216,709	34.71
2015 45,136,504 17,031,026 (28,105,478) 66,028,491 25.79 2014 43,922,167 15,874,681 (28,047,486) 67,810,110 23.41 2013 45,415,467 12,308,227 (33,107,240) 67,497,660 18.24 2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund Year ended June 30: 2021 \$ — — N/A N/A 2020 — — N/A N/A 2019 — — N/A N/A 2018 — — N/A N/A 2017 — — — N/A N/A 2016 — — — N/A N/A	2017	44,807,771	20,341,379	(24,466,392)	68,062,584	29.89
2014 43,922,167 15,874,681 (28,047,486) 67,810,110 23.41 2013 45,415,467 12,308,227 (33,107,240) 67,497,660 18.24 2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund Year ended June 30: 2021 \$ — — N/A N/A 2020 — — N/A N/A 2019 — — N/A N/A 2018 — — N/A N/A 2017 — — N/A N/A 2016 — — N/A N/A	2016	47,305,819	14,794,774	(32,511,045)	67,097,166	22.05
2013 45,415,467 12,308,227 (33,107,240) 67,497,660 18.24 2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund Year ended June 30: 2021 \$ — — N/A N/A 2020 — — N/A N/A 2019 — — N/A N/A 2018 — — N/A N/A 2017 — — N/A N/A 2016 — — N/A N/A	2015	45,136,504	17,031,026	(28,105,478)	66,028,491	25.79
2012 42,475,660 5,969,713 (36,505,947) 67,437,125 8.85 2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund Year ended June 30: 2021 \$ — — N/A N/A 2020 — — N/A N/A 2019 — — N/A N/A 2018 — — N/A N/A 2017 — — N/A N/A 2016 — — N/A N/A	2014	43,922,167	15,874,681	(28,047,486)	67,810,110	23.41
2011 38,450,553 651,718 (37,798,835) 71,746,413 0.91 Prison Officers' Pension Fund Year ended June 30: 2021 N/A N/A N/A N/A 2020 — — — N/A N/A 2019 — — — N/A N/A 2018 — — — N/A N/A 2017 — — N/A N/A 2016 — — N/A N/A	2013	45,415,467	12,308,227	(33,107,240)	67,497,660	18.24
Prison Officers' Pension Fund Year ended June 30: 2021 \$	2012	42,475,660	5,969,713	(36,505,947)	67,437,125	8.85
Year ended June 30: — — N/A N/A 2020 — — — N/A N/A 2019 — — — N/A N/A 2018 — — — N/A N/A 2017 — — — N/A N/A 2016 — — N/A N/A	2011	38,450,553	651,718	(37,798,835)	71,746,413	0.91
2021 \$ — — N/A N/A 2020 — — — N/A N/A 2019 — — — N/A N/A 2018 — — — N/A N/A 2017 — — — N/A N/A 2016 — — — N/A N/A			Prison Officer	s' Pension Fund		
2021 \$ — — N/A N/A 2020 — — — N/A N/A 2019 — — — N/A N/A 2018 — — — N/A N/A 2017 — — — N/A N/A 2016 — — — N/A N/A	Year ended June	30·				
2020 — — — N/A N/A 2019 — — — N/A N/A 2018 — — — N/A N/A 2017 — — — N/A N/A 2016 — — N/A N/A			_	_	N/A	N/A
2019 — — N/A N/A 2018 — — N/A N/A 2017 — — N/A N/A 2016 — — N/A N/A		_	_	_		
2018 — — — N/A N/A 2017 — — — N/A N/A 2016 — — N/A N/A		_	_	_		
2017 — — — N/A N/A 2016 — — N/A N/A		_	_	_		
2016 — — — N/A N/A		_	_	_		
		_	_	_		
	2015	_	_	_	N/A	N/A
2014 — — N/A N/A		_	_	_		
2013 — — N/A N/A		_	_	_		
2012 — — N/A N/A	2012	_	_	_	N/A	N/A
2011 — — N/A N/A		_	_	_		
State Police Retirement System			State Police Re	etirement System		
Year ended June 30:	Year ended lune	30∙		-		
2021 \$ 180,556,737 141,212,825 (39,343,912) 298,254,514 47.35%	-		1/1 212 825	(30 3/13 012)	208 254 514	<i>1</i> 7 35%
2020 167,567,439 117,911,260 (49,656,179) 296,189,926 39.81		·		,	·	
2019 161,134,729 98,182,956 (62,951,773) 275,790,087 35.60				,		
2018 145,908,823 74,603,780 (71,305,043) 284,707,387 26.20		, ,	, ,	(, , ,	, ,	
2017 135,017,662 53,006,614 (82,011,048) 277,771,135 19.08		·	, ,	, , ,	, ,	
		·		,		
2016 120,800,705 37,435,541 (83,365,164) 275,477,457 13.59 2015 110,904,703 38,527,297 (72,377,406) 262,496,289 14.68		, ,	, ,		, ,	
2013 110,904,703 36,527,297 (72,377,400) 202,496,269 14.06 2014 105,093,378 36,436,923 (68,656,455) 262,063,829 13.90		·		,	·	
2014 105,095,576 36,436,923 (66,636,435) 262,063,629 13.90 2013 99,876,582 27,777,047 (72,099,535) 283,216,927 9.81						
2013 99,676,582 27,777,047 (72,099,535) 265,216,927 9.61		·		,		
2012 98,809,802 13,545,807 (85,324,055) 275,219,752 4.92 2011 114,120,061 2,201,604 (111,918,457) 289,980,657 0.76		· ·	· · ·	, , ,	·	

Required Supplementary Information

Schedule of Employer Contributions - Defined Benefit Pension Plans (Unaudited)

_	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll						
	Co	nsolidated Police an	d Firemen's Pension	Fund							
Year ended June 30	:										
2021 \$	245,506	248,000	2,494	N/A	N/A						
2020	_	_	_	N/A	N/A						
2019	_	_	_	N/A	N/A						
2018	325,191	325,000	(191)	N/A	N/A						
2017	884,680	1,539,280	654,600	N/A	N/A						
2016	491,683	1,324,017	832,334	N/A	N/A						
2015	_	1,577,751	_	N/A	N/A						
2014	864,041	1,900,831	1,036,790	N/A	N/A						
2013	1,095,632	896,883	(198,749)	N/A	N/A						
2012	1,240,860	174,000	(1,066,860)	N/A	N/A						
2011	528,714	_	(528,714)	N/A	N/A						
	Teachers' Pension and Annuity Fund										
Year ended June 30	:										
2021 \$	3,727,967,714	2,936,047,960	(791,919,754)	11,338,928,538	25.89%						
2020	3,286,527,638	2,271,007,729	(1,015,519,909)	11,061,603,138	20.53						
2019	3,249,224,200	2,015,496,648	(1,233,727,552)	10,823,504,797	18.62						
2018	3,035,344,625	1,516,131,450	(1,519,213,175)	10,636,814,121	14.25						
2017	2,737,175,151	1,127,018,480	(1,610,156,671)	10,436,205,103	10.80						
2016	2,544,811,534	800,069,277	(1,744,742,257)	10,305,472,484	7.76						
2015	2,306,611,715	540,603,535	(1,766,008,180)	10,162,263,470	5.32						
2014	2,159,287,358	427,700,146	(1,731,587,212)	10,038,792,896	4.26						
2013	2,331,811,395	647,059,335	(1,684,752,060)	9,779,212,916	6.62						
2012	2,269,823,968	317,927,358	(1,951,896,610)	9,682,318,739	3.28						
2011	2,123,175,951	30,655,332	(2,092,520,619)	10,025,401,658	_						
		Police and Firemer	n's Retirement Syster	n							
Year ended June 30	:										
2021 \$	1,677,991,337	1,600,575,026	(77,416,311)	4,016,767,909	39.85%						
2020	1,592,156,607	1,427,886,341	(164,270,266)	3,937,977,209	36.26						
2019	1,545,236,051	1,332,222,254	(213,013,797)	3,870,718,707	34.42						
2018	1,424,767,509	1,236,395,284	(188,372,225)	3,803,348,329	32.51						
2017	1,335,659,737	1,046,327,392	(289,332,345)	3,726,807,562	28.08						
2016	1,311,849,713	986,654,840	(325,194,873)	3,695,509,355	26.70						
2015	1,217,110,411	941,950,336	(275,160,075)	3,682,677,356	25.58						
2014	1,150,719,106	880,431,697	(270,287,409)	3,678,910,266	23.93						
2013	1,279,412,723	895,743,379	(383,669,344)	3,656,218,573	24.50						
2012	1,238,132,402	826,461,015	(411,671,387)	3,649,416,297	22.65						
2011	1,337,424,856	889,724,548	(447,700,308)	3,720,534,369	23.91						
-	, ,,	, = -,	,,)	-, -,,-30							

Required Supplementary Information
Schedule of Employer Contributions - Defined Benefit Pension Plans

(Unaudited)

		Actual Actuarially employer & determined nonemployer contribution contribution		Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
			Public Employees	' Retirement System	1	
Year ended J	une 30:					
2021	\$	2,860,929,748	2,431,743,316	(429,186,432)	11,965,922,552	20.32%
2020		2,457,669,386	2,015,797,615	(441,871,771)	11,775,149,674	17.12
2019		2,457,773,619	1,912,209,917	(545,563,702)	11,440,021,762	16.72
2018		2,306,287,092	1,632,971,072	(673,316,020)	11,360,644,671	14.37
2017		2,207,859,541	1,448,520,025	(759,339,516)	11,296,345,312	12.82
2016		2,097,570,117	1,265,246,226	(832,323,891)	11,320,198,747	11.18
2015		1,935,315,246	1,067,584,583	(867,730,663)	11,441,433,226	9.33
2014		1,797,073,081	941,023,184	(856,049,897)	11,448,531,265	8.22
2013		1,911,359,009	1,087,389,140	(823,969,869)	11,433,091,635	9.51
2012		1,895,158,413	976,093,907	(919,064,506)	11,609,042,726	8.41
2011		1,824,391,081	832,016,186	(992,374,895)	11,981,354,783	6.94

See accompanying independent auditors' report.

Schedule of Employer Contributions - Defined Benefit Pension Plans

Last 10 Fiscal Years (Unaudited)

Notes to Schedule:

Method and assumptions used in calculations of employers' actuarially determined contributions: The actuarially determined contributions are calculated as of July 1 preceding the fiscal year in which the contributions are reported. Unless otherwise noted above, the following actuarial methods and assumptions were used to determine contribution rates in the Schedule of Employer Contributions.

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Actuarial cost method Amortization method Remaining amortization period Asset valuation method	Projected Unit Credit Level Dollar, open 30 years Five-year smoothing difference between market value and expected actuarial value	Projected Unit Credit Level Dollar 1 year Market value	Projected Unit Credit Level Dollar, open 30 years Five-year smoothing difference between market value and expected actuarial value	Projected Unit Credit Level Dollar 1 year Market value	Projected Unit Credit Level Dollar, open 30 years Five-year smoothing difference between market value and expected actuarial value	Projected Unit Credit Level Dollar, open 30 years Five-year smoothing difference between market value and expected actuarial value	Projected Unit Credit Level Dollar, open 30 years Five-year smoothing difference between market value and expected actuarial value
Projected salary increase 2021							
Initial fiscal year applied through	2025	N/A^	2025	N/A^	2026 1.55% - 4.45%	N/A	2026
Rate	2.00%	N/A^	2.95%	N/A^	based on years of service	Varies based on experience	2.00% - 6.00% based on age
Thereafter	2.75%	N/A^	3.95%	N/A^	2.75% - 5.65% based on years of service	Varies based on experience	3.00% - 7.00% based on age
2016 through 2020 Initial fiscal year applied through	2025	N/A^	2025	N/A^	2026	2025	2026
ililiai liscai year applied tillougii	2025	N/A^	2023	N/A^	1.55% - 3.80%		
Rate	2.00%	N/A^	2.95%	N/A^	based on years of service	2.10% - 8.98% based on age	1.65% - 4.15% based on age
Thereafter	3.00%	N/A^	3.95%	N/A^	2.00% - 4.90% based on years of service	3.10% - 9.98% based on age	2.65% - 5.15% based on age
2015 and 2014							
Through fiscal year 2021	2.00%	N/A^	2.95%	N/A^	Varies based on experience	2.60% - 9.48% based on age	2.15% - 4.40% based on age
Thereafter	3.00%	N/A^	3.95%	N/A^	Varies based on experience	3.60% - 10.48% based on age	3.15% - 5.40% based on age
Projected COLAs Investment rate of return	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*
2021	7.30%	2.00%	7.30%	2.00%	7.30%	7.30%	7.30%
2020	7.30%	2.00%	7.30%	2.00%	7.30%	7.30%	7.30%
2019	7.50%	5.00%	7.50%	2.00%	7.50%	7.50%	7.50%
2018	7.50%	5.00%	7.50%	2.00%	7.50%	7.50%	7.50%
2017	7.50%	5.00%	7.50%	2.00%	7.50%	7.50%	7.50%
2016	7.65%	5.00%	7.65%	2.00%	7.65%	7.65%	7.65%
2015	7.90%	5.00%	7.90%	2.00%	7.90%	7.90%	7.90%
2014	7.90%	5.00%	7.90%	2.00%	7.90%	7.90%	7.90%

^{*} Pursuant to the provisions of Chapter 78, P.L. 2011, cost of living adjustment (COLA) increases were suspended for all current and future retirees of all retirement systems.

Contributions: Contributions reported on Schedule 1 include actual contributions by State and, where applicable, the local employer's contribution revenue recorded in fiscal year 2019 that is due in fiscal year 2020 and contributions to the Non-Contributory Group Insurance Premium Fund. Contributions reported on Schedule 2 represent actual contributions by the State and local employers (where applicable) made during the year, including contributions to the Non-Contributory Group Life Insurance Premium Fund.

[^] This is a closed plan, therefore there are no active employees.

Required Supplementary Information

Schedule of Investment Returns - Defined Benefit Pension Plans

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

(Unaudited)

	JRS, SPRS, TPAF, PERS and PFRS*	POPF	CPFPF
Year ended June 30:			
2021	28.60%	0.12%	0.12%
2020	1.40%	1.57%	1.57%
2019	6.17%	2.29%	2.29%
2018	9.11%	1.36%	1.36%
2017	13.01%	0.53%	0.53%
2016	(1.15)%	0.28%	0.50%
2015	4.08%	0.09%	0.34%
2014	16.79%	0.09%	0.02%

^{*} The annual money-weighted rate of return, net of investment expense, which includes JRS, SPRS, TPAF, PFRS and PERS, is calculated on the investments held within Common Pension Funds D and E, and the State of New Jersey, Cash Management Fund for the Pension Funds, as a whole rather than by individual plan since the portfolios are managed through common trust funds.

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

Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios

(Unaudited)

June 30, 2021

	2021	2020	2019	2018	2017
Total OPEB liability: Service cost Interest on total OPEB liability Changes of benefit terms Difference between expected and actual experience Effect of changes of assumptions Contributions - employee Benefit payments	\$ 846,075,674 413,837,061 2,029,119 (1,564,654,436) 333,095,471 43,309,873 (509,642,373)	605,949,339 497,444,533 1,055,527 852,424,987 3,138,556,114 37,546,413 (466,218,997)	666,574,660 636,082,461 (1,903,958) (1,399,921,930) (1,635,760,217) 43,249,952 (470,179,613)	896,235,148 764,082,232 — (3,626,384,047) (2,314,240,675) 53,987,166 (421,621,253)	1,064,525,862 648,423,508 — (2,587,850,974) 53,585,505 (417,488,848)
Net change in total OPEB liability	(435,949,611)	4,666,757,916	(2,161,858,645)	(4,647,941,429)	(1,238,804,947)
Total OPEB liability-beginning	18,486,002,498	13,819,244,582	15,981,103,227	20,629,044,656	21,867,849,603
Total OPEB liability-ending (a)	\$ 18,050,052,887	18,486,002,498	13,819,244,582	15,981,103,227	20,629,044,656
Plan fiduciary net position: Contributions-employer Contributions-nonemployer contributing entity Contributions - employee Net investment income Benefit payments Administrative expense	\$ 325,097,477 37,777,433 43,309,873 201,343 (509,642,373) (11,334,383)	292,404,377 35,011,940 37,546,413 2,858,334 (466,218,997) (9,913,267)	346,415,056 43,854,500 43,249,952 4,826,936 (470,179,613) (9,478,435)	421,194,662 53,548,285 53,987,166 2,320,422 (421,621,253) (8,200,113)	381,813,324 53,064,311 53,585,505 791,049 (417,488,848) (8,894,576)
Net change in Plan fiduciary net position	(114,590,630)	(108,311,200)	(41,311,604)	101,229,169	62,870,765
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)	164,862,282 50,271,652	273,173,482 164,862,282	314,485,086 273,173,482	213,255,917 314,485,086	150,385,152 213,255,917
Plan's net OPEB liability-ending (a)-(b)	\$ 17,999,781,235	18,321,140,216	13,546,071,100	15,666,618,141	20,415,788,739
Plan fiduciary net position as a percentage of the total OPEB liability	0.28%	0.89%	1.98%	1.97%	1.03%
Covered-employee payroll Net OPEB liability as a percentage of covered-employee payroll	\$ 4,991,824,527 360.59%	4,872,992,497 375.97%	4,801,667,470 282.11%	4,646,915,753 337.14%	4,336,016,376 470.84%

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

Notes to Schedule:

Changes in benefit terms:

There is an increase in liability from fiscal year 2020 to 2021 due to employers adopting and or changing Chapter 48 provisions.

In 2019 there were slight changes to the Chapter 48 provisions. In 2020 employers adopted amended Chapter 48 provisions, which provided different levels of subsidy from fiscal year 2019.

Changes in assumptions:

- In 2021, the discount rate changed to 2.16% from 2.21%. Used the Scale of MP-2021.

 In 2020, the discount rate changed to 2.21% from 3.50%. Further, there were changes in the assumed health care cost trend rates, the impact of the repeal of the excise tax, and the use of the Scale MP-2020 for mortality improvement.
- In 2019, the discount rate changed to 3.50% from 3.87%, and there were changes in the assumed health care cost trend, PPO/HMO future retiree elections, and excise tax assumptions. Further, decrements, salary scale, and mortality assumptions were updated based on the July 1, 2013 June 30, 2018 PFRS and July 1, 2014 June 30, 2018 PERS experience studies. For mortality related to PFRS members and retirees, the Pub-2010 "Safety" classification headcount-weighted mortality related to PERS members and retirees, the Pub-2010 "General" classification headcount-weighted mortality related to PERS members and retirees, the Pub-2010 "General" classification headcount-weighted mortality table with fully generational mortality improvement projections from the central year using Scale MP-2019 was used. generational mortality improvement projections from the central year using Scale MP-2019 was used.

 In 2018, the discount rate changed to 3.87% from 3.58%, there were changes in the census, claims and premiums experience
- and a decrease in the assumed health care cost trend and excise tax assumptions.

Required Supplementary Information

Schedule of Investment Returns - OPEB Plan

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

(Unaudited)

Year ended June 30:

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2021	0.12%
2020	1.57%
2019	2.29%
2018	1.28%
2017	0.58%

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

Schedule of Administrative Expenses

Year ended June 30, 2021

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Personnel services:									
Salaries and wages	\$ 112,	337 1,822	391,200	1,033	4,524,389	4,885,426	6,097,093	316,798	16,330,398
Employee benefits	54,	390 644	89,312	555	2,641,238	2,380,856	3,216,360	154,857	8,538,712
Total personnel									
services	167,5	2,466	480,512	1,588	7,165,627	7,266,282	9,313,453	471,655	24,869,110
Professional services:									
Actuarial services	1,6	500 153	40,457	101	368,966	299,336	408,730	_	1,119,343
Data processing	2,6	94 270	33,315	180	974,538	411,907	1,850,530	28,633	3,302,067
Information systems	3,7	'44 310	36,610	174	1,146,594	470,741	2,203,012	102	3,861,287
Other professional (1)	1,1	73 205	28,144	113	888,941	319,639	1,454,057	_	2,692,272
Medical reviews (exams/hearings)			33,059	_	241,921	437,530	671,605	_	1,384,115
Elections			_	_	_	107,384	137,562	_	244,946
Internal audit and legal	2,1	33 178	22,302	122	774,613	426,057	1,067,258		2,292,663
Total professional									
services	11,3	1,116	193,887	690	4,395,573	2,472,594	7,792,754	28,735	14,896,693
Communication:									
Travel			_	_	212	174	360	_	746
Telephone	3	57 20	3,107	17	84,468	32,340	138,189	2,800	261,298
Postage	5	60 64	8,917	54	277,145	101,267	453,406	1,000	842,413
Motor pool		26 1	354	1	6,118	3,450	10,009	_	19,959
Printing and office	2	278 15	2,431	13	65,930	56,112	107,861		232,640
Total communication	1,2	221 100	14,809	85	433,873	193,343	709,825	3,800	1,357,056
Miscellaneous:									
Office space	1,6	25 189	22,600	141	523,561	291,065	947,336	_	1,786,517
Maintenance		52 11	2,712	10	49,175	21,081	80,450	_	153,491
Equipment		31 24	2,905	21	100,602	42,333	171,127	_	317,043
Other services and charges		<u> </u>	104		4,165	8,398,244	6,812	12,000	8,421,326
Total miscellaneous	1,7	08 225	28,321	172	677,503	8,752,723	1,205,725	12,000	10,678,377
Total administrative									
expenses	\$ 181,8	3,907	717,529	2,535	12,672,576	18,684,942	19,021,757	516,190	51,801,236

(1) Portion of consulting

Schedule of Investment Expenses

Year ended June 30, 2021

<u>-</u>	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Investment expense \$	18,842	478	223,635	84	2,770,088	4,282,644	3,540,811	156,582	10,993,164

Schedule of Expenses for Consultants

Year ended June 30, 2021

	_	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	Total
Actuarial: Cheiron Segal	\$	1,600	153 —	40,457 —	101 —	368,966 —	<u> </u>	408,730 —	820,007 299,336
Professional services: Exams/Hearings/Court Reporter Board elections:	s	_	_	33,059	_	241,921	437,530	671,605	1,384,115
Election America	_						107,384	137,562	244,946
Total expenses for consultants	\$_	1,600	153	73,516	101	610,887	844,250	1,217,897	2,748,404

Combining Schedule of Fiduciary Net Position Information Fiduciary Funds – Select Pension Trust Funds

June 30, 2021

_	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Total
Assets: Cash and cash equivalents \$	293,674	77,237	531,979	50,990	5,190,499	4,706,062	8,173,275	19,023,716
Receivables: Contributions: Members	401.903		3,298,023		97.194.185	53,637,567	60.457.734	214.989.412
Employers and nonemployer	401,903 83,475	_	3,296,023 74,256	_	92,964,171	1,230,855,642	1,248,049,492	2,572,027,036
Accrued interest and dividends	144	3	74, <u>2</u> 50 581	3	11,987	4,136,659	10,868	4,160,245
Other	24,479	4,331	974,577	168,135	33,864,234	6,120,518	22,243,398	63,399,672
Total receivables	510,001	4,334	4,347,437	168,138	224,034,577	1,294,750,386	1,330,761,492	2,854,576,365
Investments, at fair value: Cash Management Fund Common Pension Fund A Common Pension Fund D Common Pension Fund E	21,869,272 127,526 112,918,682 52,123,260	5,117,493 — — —	50,260,743 1,620,048 1,444,031,009 645,037,919	2,038,584 — — —	744,784,521 19,827,878 17,671,105,148 8,157,722,880	821,463,484 — 20,643,706,166 9,529,999,441	948,419,967 25,656,272 22,863,466,774 10,576,315,781	2,593,954,064 47,231,724 62,735,227,779 28,961,199,281
Total investments	187,038,740	5,117,493	2,140,949,719	2,038,584	26,593,440,427	30,995,169,091	34,413,858,794	94,337,612,848
Securities lending collateral Members' loans and mortgages	2,723,731 190,883		34,831,716 11,006,147		426,247,645 251,970,606	497,950,329 1,499,952,093	551,493,550 523,885,534	1,513,246,971 2,287,005,263
Total assets	190,757,029	5,199,064	2,191,666,998	2,257,712	27,500,883,754	34,292,527,961	36,828,172,645	101,011,465,163
Liabilities:								
Accounts payable and accrued expenses	46		206,028		126,053,254	8,410,108	158,811,686	293,481,122
Retirement benefits payable Noncontributory group life insurance premiums payable	5,209,330 83,475	59,113 —	19,927,773 74,256	69,712	395,033,511 7.907.637	237,357,092 5,759,495	375,311,544 15,953,801	1,032,968,075 29,778,664
Administrative expense payable	181,800	3,907	717,529	2,535	12,672,576	5,759, 4 95	19,021,757	32,600,104
Securities lending collateral and rebates payable	2,722,623		34,817,548		426,074,261	497,747,779	551,269,221	1,512,631,432
Total liabilities	8,197,274	63,020	55,743,134	72,247	967,741,239	749,274,474	1,120,368,009	2,901,459,397
Net position restricted for pension \$	182,559,755	5,136,044	2,135,923,864	2,185,465	26,533,142,515	33,543,253,487	35,707,804,636	98,110,005,766

Combining Schedule of Changes In Fiduciary Net Position Information Fiduciary Funds – Select Pension Trust Funds

Year ended June 30, 2021

	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Total
Additions:								
Contributions:								
Members:								
State	\$ 9,426,354	_	27,268,772	_	883,659,076	51,571,527	346,264,728	1,318,190,457
Local Employers:	_	_	_	_	_	367,886,668	563,674,866	931,561,534
State	52,508,011	_	141,212,825	248,000	2,684,911	276,704,704	1,306,192,295	1,779,550,746
Local	J2,300,011 —	_	T41,212,025	240,000	2,004,911	1,165,565,352	1,171,116,225	2,336,681,577
Nonemployer	_	_	_	_	2,933,363,049	178,577,000	13,079,912	3,125,019,961
Employer specific and other		330,028		441,879	403,226	6,161,341	7,082,908	14,419,382
Total contributions	61,934,365	330,028	168,481,597	689,879	3,820,110,262	2,046,466,592	3,407,410,934	9,505,423,657
Investment income:								
Net increase in fair value of investments	34,559,805	_	443,135,634	_	5,459,925,762	6,400,152,014	7,115,092,187	19,452,865,402
Interest	2,684,847	6,381	34,692,856	6,040	445,035,747	556,857,635	596,902,514	1,636,186,020
	37,244,652	6,381	477,828,490	6,040	5,904,961,509	6,957,009,649	7,711,994,701	21,089,051,422
Less investment expense	18,842	478	223,635	84	2,770,088	4,282,644	3,540,811	10,836,582
Net investment income	37,225,810	5,903	477,604,855	5,956	5,902,191,421	6,952,727,005	7,708,453,890	21,078,214,840
Transfers			688,000		10,766,456	2,912,909	9,337,175	23,704,540
Total additions	99,160,175	335,931	646,774,452	695,835	9,733,068,139	9,002,106,506	11,125,201,999	30,607,343,037
Deductions: Benefits:								
Benefit expense - retirement allowances	61,188,990	642,747	236,154,920	702,399	4,597,190,350	2,782,742,932	4,176,411,932	11,855,034,270
Noncontributory group insurance expense	1,221,011	_	1,719,825	_	55,342,960	58,204,999	117,825,095	234,313,890
Refunds of contributions	295,182	_	85,096	_	58,051,016	11,135,743	140,317,667	209,884,704
Transfers	.	. 	157,527		9,478,706	604,094	14,091,794	24,332,121
Administrative and miscellaneous expenses	324,080	3,429	494,765	2,620	9,042,590	18,293,096	14,120,177	42,280,757
Total deductions	63,029,263	646,176	238,612,133	705,019	4,729,105,622	2,870,980,864	4,462,766,665	12,365,845,742
Change in net position	36,130,912	(310,245)	408,162,319	(9,184)	5,003,962,517	6,131,125,642	6,662,435,334	18,241,497,295
Net position restricted for pension:								
Beginning of year, as restated	146,428,843	5,446,289	1,727,761,545	2,194,649	21,529,179,998	27,412,127,845	29,045,369,302	79,868,508,471
End of year	\$ 182,559,755	5,136,044	2,135,923,864	2,185,465	26,533,142,515	33,543,253,487	35,707,804,636	98,110,005,766