

Financial Statements and Supplementary Schedules
June 30, 2020

(With Independent Auditors' Report Thereon)

Financial Statements and Supplementary Schedules
June 30, 2020

Table of Contents

	Page
Independent Auditors' Report	1
Management's Discussion and Analysis (Unaudited)	3
Basic Financial Statements:	40
Statement of Fiduciary Net Position – Fiduciary Funds Combining Statement of Fiduciary Net Position – Fiduciary Funds – Pension Trust Funds	10
and Other Postemployment Benefit (OPEB) Plan	11
Statement of Changes in Fiduciary Net Position – Fiduciary Funds	12
Combining Statement of Changes in Fiduciary Net Position – Fiduciary Funds – Pension	40
Trust Funds and Other Postemployment Benefit Plan Notes to Financial Statements	13 14
	17
Supplementary Schedules:	
Required Supplementary Information (Unaudited)	
Defined Benefit Pension Plans:	
1 Schedule of Changes in Net Pension Liability and Related Ratios	55
2 Schedule of Employer Contributions	62
3 Schedule of Investment Returns – Annual Money-Weighted Rate of Return, Net of Investment Expense	66
Defined Benefit Other Postemployment Benefit Plan:	00
4 Schedule of Changes in Net OPEB Liability and Related Ratios	67
5 Schedule of Investment Returns – OPEB Plan – Annual Money-Weighted Rate of	
Return, Net of Investment Expense	68
Supplementary Information	
6 Schedule of Administrative Expenses	69
7 Schedule of Investment Expenses	70
8 Schedule of Expenses for Consultants	71
9 Combining Schedule of Fiduciary Net Position Information – Fiduciary Funds – Select	
Pension Trust Funds 10 Combining Schedule of Changes in Fiduciary Net Position Information – Fiduciary	72
Funds – Select Pension Trust Funds	73

Financial Statements and Supplementary Schedules
June 30, 2020

Table of Contents

		Page
Sup	pplementary Information, continued	
11 12	Combining Schedule of Balance Sheet Information – Fiduciary Funds – Agency Funds Combining Schedule of Changes in Fiduciary Net Position Information – Fiduciary	74
12	Funds – Agency Funds	75
13	Combining Schedule of Balance Sheet Information – Agency Fund – Dental Expense Program Fund	76
14	Combining Schedule of Changes in Fiduciary Net Position Information – Agency Fund – Dental Expense Program Fund	77
15	Schedule of Changes in Assets and Liabilities Information – Agency Fund – Alternate Benefit Program Fund	78
16		79
17	Schedule of Changes in Assets and Liabilities Information – Agency Fund – Dental Expense Program Fund – Total	80
18	3,	
4.0	Expense Program Fund – State	81
19	Schedule of Changes in Assets and Liabilities Information – Agency Fund – Dental Expense Program Fund – Local	82



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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, 2020, 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, 2020, 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, 2020 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.

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.

KPMG LLP

Short Hills, New Jersey March 31, 2021

Management's Discussion and Analysis
(Unaudited)
June 30, 2020

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, 2020. 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 decreased by \$2.4 billion as a result of this year's operations from \$87.3 billion to \$84.9 billion.
- Additions for the year are \$10.2 billion, which are comprised of member, employer, nonemployer, and employer specific and other pension contributions of \$8.9 billion and net investment income of \$1.3 billion.
- Deductions for the year are \$12.7 billion, which are comprised of benefits, refund payments, and transfers of \$12.6 billion and administrative expenses of \$62.0 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. Agency funds are custodial in nature and do not involve measurement of results of operations.

The Division administers fourteen fiduciary funds: ten pension trust funds, one OPEB plan, and three agency funds.

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.

Management's Discussion and Analysis
(Unaudited)
June 30, 2020

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.

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

	_	2020	2019	Increase/ (Decrease)
Assets:				
Cash and cash equivalents	\$	33,979,690	24,558,213	9,421,477
Receivables		3,548,193,762	2,601,722,359	946,471,403
Investments		80,331,516,530	83,617,350,788	(3,285,834,258)
Securities lending collateral		1,416,947,355	1,009,702,674	407,244,681
Members' loans and mortgages	_	2,334,826,814	2,339,329,814	(4,503,000)
Total assets	_	87,665,464,151	89,592,663,848	(1,927,199,697)
Liabilities:				
Accounts payable and accrued expenses		316,817,708	293,069,149	23,748,559
Retirement benefits payable		997,361,992	963,572,944	33,789,048
Noncontributory group life insurance				
premiums payable		26,676,218	15,712,054	10,964,164
Administrative expense payable		44,013,679	6,773,517	37,240,162
Securities lending collateral and				
rebates payable	_	1,416,478,685	1,008,482,091	407,996,594
Total liabilities	-	2,801,348,282	2,287,609,755	513,738,527
Net position	\$	84,864,115,869	87,305,054,093	(2,440,938,224)

4

Management's Discussion and Analysis
(Unaudited)
June 30, 2020

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 2019 and 2020, total assets decreased by \$1.9 billion or 2.2%. This is primarily attributable to a decrease of \$3.3 billion in investments partially due to lower returns as explained more thoroughly below. This is offset by an increase of \$1.4 billion in various receivables, including employer state contributions, securities lending collateral, and cash & equivalents, and a decrease of \$4.5 million in members' loans & mortgages. The increase in receivables is partly due to the State making the 4th quarter pension contribution after the end of the fiscal year on July 9, 2020.

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 \$513.7 million or 22.5%. This is due to an increase in securities lending collateral and rebates payable of \$408.0 million and an increase of \$105.7 million in retirement benefits and other payables.

Net position restricted for pension and other postemployment benefits decreased by \$2.4 billion or 2.8%.

Summary of Fiduciary Net Position Agency Funds

	_	2020	2019	Increase
Assets	\$	127,633,618	100,501,527	27,132,091
Liabilities	_	127,633,618	100,501,527	27,132,091
Net position	\$			

Assets of the agency funds consist of cash and cash equivalents, investments, contributions due from the State and local employers and other receivables. Between State fiscal years 2019 and 2020, total assets increased by \$27.1 million or 27.0%. This is attributable to the increased amount invested in the Cash Management Fund (CMF) of \$22.0 million, an increase in receivables of \$4.1 million, and an increase of cash and cash equivalents of \$1.0 million.

Liabilities in the agency funds vary according to each plan. In the Alternate Benefit Program (ABP), they include reimbursements to state and county colleges, reimbursement to the State of New Jersey general fund of any unused appropriations, and NCGI benefits payable. In the Dental Expense Program (DEP), they include claims payable, and in the Pension Adjustment Fund (PAF), they include liabilities for payroll and amounts due to the State of New Jersey general fund and other pension trust funds. Between State fiscal years 2019 and 2020, total liabilities increased by \$27.1 million or 27.0%. This was comprised of a \$27.2 million increase in accounts payable and a \$71.3 thousand increase in amounts due to the State of New Jersey, offset by \$0.1 million decrease in other liability items of the PAF.

Management's Discussion and Analysis
(Unaudited)
June 30, 2020

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

		2020	2019	Increase/ (Decrease)
Additions:	_			
Member contributions	\$	2,476,946,979	2,449,311,731	27,635,248
Employer contributions		3,911,461,795	3,545,865,979	365,595,816
Nonemployer contributions		2,466,336,628	2,194,331,868	272,004,760
Employer specific and other contributions		10,082,344	16,398,082	(6,315,738)
Net investment income		1,351,799,032	5,009,303,471	(3,657,504,439)
Transfers	_	25,850,306	28,924,693	(3,074,387)
Total additions	_	10,242,477,084	13,244,135,824	(3,001,658,740)
Deductions:				
Benefits		12,392,406,653	12,044,481,718	347,924,935
Refunds of contributions		202,103,077	204,000,194	(1,897,117)
Transfers		26,874,616	29,714,557	(2,839,941)
Administrative expenses	_	62,030,962	53,093,287	8,937,675
Total deductions	_	12,683,415,308	12,331,289,756	352,125,552
Change in net position	\$ <u>_</u>	(2,440,938,224)	912,846,068	(3,353,784,292)

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 a decrease of \$3.0 billion or 22.7% in total additions mainly attributable to a decrease in net investment income of \$3.7 billion.

Member contributions increased by \$27.6 million mainly due to membership and salary increases.

The State contributed \$3,752.2 million to the pension trust funds in State fiscal year 2020. It was composed of \$402.6 million of normal cost and \$3,349.6 million of accrued liability. The contributions were as follows: \$2,228.5 million to TPAF, \$990.9 million to PERS, \$380.3 million to the Police & Firemen's Retirement System (PFRS), \$36.6 million to JRS, and \$115.9 million to the State Police Retirement System (SPRS). Between fiscal year 2019 and 2020, the State increased its contribution to the pension trust funds by \$471.3 million from \$3,280.9 million to \$3,752.2 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 2019 and 2020 were approximately 60% and 70% of the full actuarially recommended contribution, respectively.

State NCGI contributions for the State fiscal year totaling \$86.6 million were as follows: \$42.5 million for TPAF, \$32.0 million for PERS, \$9.2 million for PFRS, \$0.9 million for JRS, and \$2.0 million for SPRS. Between State fiscal years 2019 and 2020, the State's contribution toward NCGI increased by \$0.7 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.

Management's Discussion and Analysis
(Unaudited)
June 30, 2020

The annual local employer pension appropriation billings increased per the actuarial valuation as of July 1, 2018. For PERS, the amount accrued in State fiscal year 2019 for normal contribution, accrued liability, and NCGI was \$972.7 million and was due on April 1, 2020. For State fiscal year 2020, the total amount accrued was \$1,093.9 million and is due April 1, 2021. For PFRS, the total amount accrued in State fiscal year 2019 for normal contributions, accrued liability, and NCGI was \$1,010.2 million and was due April 1, 2020. For State fiscal year 2020, the total amount accrued was \$1,117.3 million and is due April 1, 2021.

For the OPEB plan, employer contributions decreased by \$54 million, which is primarily attributable to lower approved premium rates in plan year 2019 for early and Medicare retiree coverage. Premium rates were lowered by 37.1% for Early Retirees and 36.6% for Medicare Retirees between plan year 2018 and plan year 2019 resulting in a reduction in total employer contributions between fiscal year 2019 and fiscal year 2020. The lower rates are due to various savings initiatives implemented by the State, including a renegotiated Medicare Advantage Contract with Aetna, prescription drug formulary management changes, and mandatory generic utilization to achieve lower prescription drug costs.

During fiscal year 2020, the JRS, Prison Officers' Pension Fund (POPF), SPRS, Consolidated Police and Firemen's Pension Fund (CPFPF), TPAF, PFRS, and PERS (collectively the Pension Funds) returned +1.21%, falling short of long-term objectives and reflecting a challenging global economic and investment environment that was amplified by volatility. Fiscal year returns were impacted by certain private market investments which are inherently longer-term strategies. Investments in real estate, real assets, and certain private credit strategies were meaningful detractors to overall returns. Private equity also underperformed its benchmark during fiscal year 2020. Many of these same private market investments are among the best performing portfolios for the Pension Funds over longer-term periods.

The global economy experienced both the sharpest recession and the fastest rebound on record in the midst of the COVID-19 pandemic and the concurrent monetary and fiscal response to the pandemic. In parallel fashion, the global equity markets entered into a bear market and then rebounded into a bull market, both at the fastest pace on record. After U.S. equities reached all-time highs on February 19, 2020, global stocks, as measured by the MSCI All Country World Index (ACWI) declined -33.64% through late March. From March 23, 2020 through June 30, 2020, global stocks rebounded sharply, up +37.50%.

The investment strategy for the U.S. Equity portfolio was shifted from an active approach to a passive approach during fiscal year 2020. Going forward, the U.S. Equity portfolio is expected to realize investment returns materially in line with the MSCI USA IMI Index, a broad benchmark intended to be representative of the U.S. equity market.

The fixed income portfolio was the best performing asset class for the Pension Funds during fiscal year 2020. High quality fixed income investments realized strong returns as interest rates declined to record lows. Within fixed income, U.S. Treasuries outperformed in a flight to quality, returning +10.67% as yields declined across the curve. U.S. Treasuries also benefited from Federal Reserve purchases as part of extraordinary monetary policy and government intervention to support the broader economy while the Federal Reserve's balance sheet expanded to \$7.0 trillion.

These government actions also triggered a sharp rebound in the credit markets, with the investment grade fixed income portfolio returning 10.46%.

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 2020 rate was 1.40%

Management's Discussion and Analysis
(Unaudited)
June 30, 2020

compared to 6.17% 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 2019 and 2020, benefit payments increased by \$347.9 million or 2.8% due to an increase in the number of retirees receiving retirement and other benefits.

The change in net position of \$3.4 billion was mainly attributable to the decrease in net investment income of \$3.7 billion and the increase in benefit expense of \$0.4 billion offset by the increase of \$0.7 billion in member, employer, and nonemployer contributions.

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, 2020		Year ended June 30, 2020
US Equity	6.02	Private Credit	(3.64)
Custom US Policy Benchmark	7.05	BBG Barclays US Corp HY 1 Month lag +100bps	2.33
Non-US Developed Markets Equity	(4.09)	Investment Grade Credit	10.46
Custom EAFE + Canada Benchmark	(5.51)	Custom Investment Grade Credit Benchmark	9.92
Emerging Markets Equity	(4.67)	Income	3.18
Custom EM Benchmark	(3.01)	Income Benchmark	5.95
Equity Oriented Hedge Funds	(7.67)	Cash Equivalents	1.91
50% HFRI EH 50% HFRI ED ACTIVIST (1 month lag)	(2.81)	ICE BofA US 3-Month Treasury Bill	1.63
Private Equity	0.89	U.S. Treasuries	10.67
Custom Cambridge Blend	1.42	Custom Government Benchmark	10.45
Global Growth	1.63	Risk Mitigation Strategies	1.68
Global Growth Benchmark	3.22	T-Bill + 300 BP	4.74
Real Estate	(3.42)	Defensive	4.40
Real Estate Index	3.93	Liquidity Benchmark	5.46
Real Assets	(19.41)	Opportunistic Private Equity	8.19
Custom Commodities and Real Asset Benchmark	(20.07)	Custom Cambridge Blend	1.42
Real Return	(8.21)	Total Pension Funds	1.21
Real Return Benchmark	(2.47)	Pension Fund Policy Index	4.13
High Yield	(0.92)		
Custom High Yield Benchmark	0.00		

8

Management's Discussion and Analysis
(Unaudited)
June 30, 2020

Overall Financial Condition of the Funds

Based on GASB 67 and actuaries' GASB 67 disclosures for State fiscal year 2020, 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 38.37% and the net pension liability as a percentage of covered payroll was 472.63%. For the prior year, the combined state and local ratios of plan fiduciary net position as a percentage of the total pension liability was 39.73% and the net pension liability as a percentage of covered payroll was 471.27%.

For the OPEB plan, total expenses incurred exceeded total revenues recognized by \$108.3 million, decreasing the surplus at the beginning of the year from \$273.2 million to \$164.9 million at year-end.

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 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, 2020

		Pension st Funds and Other Postemployment Benefit Plan	Agency Funds
Assets:	Φ.	00.070.000	0.770.000
Cash and cash equivalents	\$	33,979,690	3,773,222
Receivables:			
Contributions: Members		210,419,832	
Employers and nonemployer		3,251,922,265	 144.747
Accrued interest and dividends		4,940,637	—
Other		80,911,028	48,893,420
Total receivables		3,548,193,762	49,038,167
Investments, at fair value:			
Cash Management Fund		1,985,554,030	74,822,229
Common Pension Fund D		50,538,387,136	_
Common Pension Fund E		22,981,746,959	_
Domestic equities		771,156,887	_
Fixed income mutual funds		526,848,710	_
Equity mutual funds		3,527,822,808	<u> </u>
Total investments		80,331,516,530	74,822,229
Securities lending collateral		1,416,947,355	_
Members' loans and mortgages		2,334,826,814	
Total assets	_	87,665,464,151	127,633,618
Liabilities:			
Accounts payable and accrued expenses		316,817,708	122,756,367
Retirement benefits payable		997,361,992	_
Noncontributory group life insurance premiums payable		26,676,218	_
Administrative expense payable		44,013,679	4 000 004
Assets held for local contributing employers Pension adjustment payroll payable		_	1,906,984 69,658
Due to State of New Jersey		_	2,786,837
Due to other funds		_	113,772
Securities lending collateral and rebates payable		1,416,478,685	-
Total liabilities		2,801,348,282	127,633,618
Net position:			
Restricted for pension and other postemployment benefits	\$	84,864,115,869	

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

June 30, 2020

Other

		Defined Benefit Pension Plans							Defined Contribution	on Pension Plans	Other 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: Cash and cash equivalents	\$ 379,896	32,471	280,141	19,133	10,637,877	7,614,664	13,137,086	15,812	17,414	1,558,955	286,241	33,979,690
Receivables:	φ 379,090	32,471	200,141	19,100	10,037,077	7,014,004	13, 137,000	13,012	17,414	1,556,955	200,241	33,373,090
Contributions:												
Members	458,752	_	1,122,475	_	90,067,355	55,812,952	61,756,358	_	_	453,723	748,217	210,419,832
Employers and nonemployer	9,189,865	_	29,115,653	_	499,637,216	1,306,657,812	1,398,738,752	_	_	_	8,582,967	3,251,922,265
Accrued interest and dividends	2,763	39	10,976	49	229,807	3,804,535	205,077	14	540,613	146,764	· · · —	4,940,637
Other	503,050	31,614	794,742	159,906	33,118,131	5,729,483	19,544,266		<u> </u>	<u> </u>	21,029,836	80,911,028
Total receivables	10,154,430	31,653	31,043,846	159,955	623,052,509	1,372,004,782	1,480,244,453	14	540,613	600,487	30,361,020	3,548,193,762
Investments, at fair value: Cash Management Fund	8,625,431	4,650,292	33,353,739	958,559	486,282,026	667,963,227	591,389,692	75,964	3,448,623	1,933,298	186,873,179	1,985,554,030
Common Pension Fund D	89,829,262	_	1,146,031,194	-	14,150,532,031	16,584,637,809	18,567,356,840	_	_	_	_	50,538,387,136
Common Pension Fund E	42,500,206	_	526,451,135	_	6,514,986,694	7,500,563,862	8,397,245,062	_	_	_	_	22,981,746,959
Domestic equities	_	_	_	_	_	_	_	_	546,804,925	224,351,962	_	771,156,887
Fixed income mutual funds	_	_	_	_	_	_	_	_	526,848,710	_	_	526,848,710
Equity mutual funds									3,527,822,808			3,527,822,808
Total investments	140,954,899	4,650,292	1,705,836,068	958,559	21,151,800,751	24,753,164,898	27,555,991,594	75,964	4,604,925,066	226,285,260	186,873,179	80,331,516,530
Securities lending collateral Members' loans and mortgages	2,518,548 244,322		32,131,335 10,957,926	_ 	396,739,193 263,806,406	464,984,342 1,522,588,879	520,573,937 537,229,281	_ 		_ 		1,416,947,355 2,334,826,814
Total assets	154,252,095	4,714,416	1,780,249,316	1,137,647	22,446,036,736	28,120,357,565	30,107,176,351	91,790	4,605,483,093	228,444,702	217,520,440	87,665,464,151
Liabilities: Accounts payable and accrued												
expenses	191	461	43,860	2,276	112,921,154	7,585,964	143,200,140	68,493	864,400	130,299	52,000,470	316,817,708
Retirement benefits payable	5,022,854	65,707	19,242,894	79,195	385,051,609	227,993,747	359,639,908	23,297	_	242,781	_	997,361,992
Noncontributory group life												
insurance premiums payable	37,365	_	135,653	_	5,389,614	7,819,466	13,294,120	_	_	_	_	26,676,218
Administrative expense payable	245,127	5,236	944,656	3,449	16,886,394	_	25,271,129	_	_	_	657,688	44,013,679
Securities lending collateral and rebates payable	2,517,715		32,120,708		396,607,967	464,830,543	520,401,752					1,416,478,685
Total liabilities	7,823,252	71,404	52,487,771	84,920	916,856,738	708,229,720	1,061,807,049	91,790	864,400	373,080	52,658,158	2,801,348,282
Net position: Restricted for pension and other												
postemployment benefits	\$ 146,428,843	4,643,012	1,727,761,545	1,052,727	21,529,179,998	27,412,127,845	29,045,369,302		4,604,618,693	228,071,622	164,862,282	84,864,115,869

Statement of Changes in Fiduciary Net Position Fiduciary Funds

Year ended June 30, 2020

	Pension Trust Funds and Other Postemployment Benefit Plan
Additions:	
Contributions:	
Members	\$ 2,476,946,979
Employers Nonemployer	3,911,461,795 2,466,336,628
Employer specific and other	10,082,344
Total contributions	8,864,827,746
Investment income:	
Net increase in fair value of investments	(571,608,982)
Interest and Dividends	1,935,851,668
	1,364,242,686
Less investment expense	12,443,654
Net investment income	1,351,799,032
Transfers	25,850,306
Total additions	10,242,477,084
Deductions:	
Benefits	12,392,406,653
Refunds of contributions	202,103,077
Transfer	26,874,616
Administrative and miscellaneous expenses	62,030,962
Total deductions	12,683,415,308
Change in net position	(2,440,938,224)
Net position restricted for pension and other postemployment benefits: Beginning of year	87,305,054,093
End of year	\$ 84,864,115,869

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

Year ended June 30, 2020

Other

				Defined Ber	nefit Pension Plans				Defined Contribut	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	\$ 9.239.505	_	24,292,258	_	867,037,595	416.433.179	908,936,226	_	207,036,966	6,424,837	37,546,413	2.476.946.979
Employers	37,496,113	_	117,911,260	_	2,109,340	1.352.498.105	2,108,766,760	275.840	201,030,900	0,424,037	292,404,377	3.911.461.795
Nonemployer	_	_	_	_	2,268,898,389	154,309,000	8,117,299	_	_	_	35,011,940	2,466,336,628
Employer specific and other		361,956		541,279	329,570	6,997,374	1,842,717	9,448				10,082,344
Total contributions	46,735,618	361,956	142,203,518	541,279	3,138,374,894	1,930,237,658	3,027,663,002	285,288	207,036,966	6,424,837	364,962,730	8,864,827,746
Investment income: Net increase in fair value of investments	(1,012,368)		(127,080,354)	_	(170,692,049)	(180,484,772)	(199,246,573)	_	98,932,443	7,974,691	_	(571,608,982)
Interest and Dividends	3,009,894	75,528	152,092,435	17,270	492,607,888	610,080,934	659,897,011	3,168	10,932,198	4,277,008	2,858,334	1,935,851,668
	1,997,526	75,528	25,012,081	17,270	321,915,839	429,596,162	460,650,438	3,168	109,864,641	12,251,699	2,858,334	1,364,242,686
Less investment expense	25,211	608	278,133	141	3,522,738	4,052,806	4,379,203		184,814			12,443,654
Net investment income	1,972,315	74,920	24,733,948	17,129	318,393,101	425,543,356	456,271,235	3,168	109,679,827	12,251,699	2,858,334	1,351,799,032
Transfers	1,025,802		331,647		15,588,379	2,857,249	6,047,229					25,850,306
Total additions	49,733,735	436,876	167,269,113	558,408	3,472,356,374	2,358,638,263	3,489,981,466	288,456	316,716,793	18,676,536	367,821,064	10,242,477,084
Deductions:												
Benefits Refunds of contributions	60,908,427 40,682	715,168	230,506,292 131,740	889,923	4,549,396,763	2,716,584,881 8,980,837	4,125,910,761	234,077 54,379	219,539,196	21,502,168	466,218,997	12,392,406,653 202,103,077
Transfers	40,062	_	26,341	_	65,752,288 6,171,046	506,321	127,143,151 20,170,908	54,579	_	_	_ _	26,874,616
Administrative and miscellaneous			20,041		0,171,040	000,021	20,170,000					20,014,010
expenses	219,976	4,628	632,762	3,308	18,590,555	12,859,324	19,365,010		442,132		9,913,267	62,030,962
Total deductions	61,169,085	719,796	231,297,135	893,231	4,639,910,652	2,738,931,363	4,292,589,830	288,456	219,981,328	21,502,168	476,132,264	12,683,415,308
Change in net position	(11,435,350)	(282,920)	(64,028,022)	(334,823)	(1,167,554,278)	(380,293,100)	(802,608,364)	_	96,735,465	(2,825,632)	(108,311,200)	(2,440,938,224)
Net position restricted for pension and other postemployment benefits:	457.004.400	4 005 000	4 704 700 507	4 207 552	00.000.704.070	07 700 400 045	00.047.077.000		4 507 000 000	000 007 054	070 470 400	07.005.054.000
Beginning of year	157,864,193	4,925,932	1,791,789,567	1,387,550	22,696,734,276	27,792,420,945	29,847,977,666		4,507,883,228	230,897,254	273,173,482	87,305,054,093
End of year	\$ 146,428,843	4,643,012	1,727,761,545	1,052,727	21,529,179,998	27,412,127,845	29,045,369,302		4,604,618,693	228,071,622	164,862,282	84,864,115,869

Notes to Financial Statements
June 30, 2020

(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
The Division oversees the following agency funds:	

Agency Fund

Pension Adjustment Fund (PAF) Alternate Benefit Program (ABP) Dental Expense Program Fund (DEP)

Notes to Financial Statements
June 30, 2020

(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, 2020

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.

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 PFRSNJ has adopted regulations for governing the methods, practices, and procedures for investment or reinvestments of money of PFRS on March 8, 2021. The regulations will be effective upon publication, at the earliest April 5, 2021.

Plan Membership and Contributing Employers

Membership and contributing employers of the defined benefit pension plans consisted of the following at June 30, 2020:

	JRS	POPF	SPRS	CPFPF	TPAF*	PFRS	PERS	CPF
Inactive plan members or beneficiaries currently receiving benefits Inactive plan members entitled to but not yet	633	62	3,400	52	106,388	45,537	182,492	13
receiving benefits	6	_	_	_	432	65	942	_
Active plan members	426		2,820		156,066	42,520	249,045	
Total	1,065	62	6,220	52	262,886	88,122	432,479	13
Contributing employers	1	1	1	23	23	582	1,691	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, 2020

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 Firemen 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

Notes to Financial Statements
June 30, 2020

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 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 2020, the TPAF, PFRS, and PERS recognized \$1.015 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 2020. 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, 2020. The vesting and benefit provisions were set by N.J.S.A. 43:7.

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

Notes to Financial Statements
June 30, 2020

was 9% in State fiscal year 2020. 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 no contribution towards the normal cost or unfunded accrued liability during the fiscal year ended June 30, 2020. The vesting and benefit provisions were set by N.J.S.A. 43:16.

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 7.50% in State fiscal year 2020. 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.

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

Notes to Financial Statements
June 30, 2020

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 2020. 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:

Tier	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.

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 7.50% 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 2020. 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.

Notes to Financial Statements
June 30, 2020

The following represents the membership tiers for PERS:

Tier	Definition
1	Members who were enrolled prior to July 1, 2007
ı	
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.

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, 2020

(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 who 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, 2020, membership in the defined contribution pension plans consisted of the following:

Plan	Members
NJSEDCP	57,398
SACT	2,938

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.

Notes to Financial Statements
June 30, 2020

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.

Notes to Financial Statements
June 30, 2020

Plan Membership and Contributing Employers

Membership and contributing employers/nonemployers of the defined benefit OPEB plan consisted of the following at June 30, 2020:

Inactive plan members or beneficiaries currently receiving benefits	30,614
Inactive plan members entitled to but not yet receiving benefits	_
Active plan members	63,488
Total	94,102
Contributing employers	593
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 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 \$292.4 million and the State of New Jersey, as the nonemployer contributing entity, contributed \$35.0 million for fiscal year 2020.

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.

24

Notes to Financial Statements
June 30, 2020

(e) Agency Funds

The Division oversees PAF, ABP and DEP as agency funds. For PAF, the Division utilizes the annual appropriation payment from the State to pay COLA benefits to retirees and beneficiaries of POPF, CPFPF and CPF. For ABP, the Division collects from the State, the contributions related to the employer portion of the plan and remits it to the pension providers (insurance and mutual fund companies) on behalf of the participating employees at the State and county colleges. For DEP, the Division receives employer contributions from the State and local employers and from active and retired employees to pay premiums to the plan.

(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 agency funds 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 agency funds. 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.

Agency funds – Agency funds are used to account for the assets that the Division holds on behalf of others as their agent. Agency funds are custodial in nature and do not involve measurement of results of operations.

Notes to Financial Statements
June 30, 2020

(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 http://www.nj.gov/treasury/doinvest/cmf/ CMFStatementsFiscal2020.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.

(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

Notes to Financial Statements
June 30, 2020

Treasurer. For 2020, the interest rate was 7.25%. 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, 2020, Common Pension Fund E had unfunded commitments totaling approximately \$8.2 billion.

(i) 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.

Notes to Financial Statements
June 30, 2020

(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, 2020 are as follows:

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Total pension liability Plan fiduciary net	\$ 1,255,157,975	4,028,676	5,045,134,550	3,406,527	87,522,678,686	46,637,786,518	67,704,953,253
position	146,428,843	4,643,012	1,727,761,545	1,052,727	21,529,179,998	27,412,127,845	29,045,369,302
Net pension liability (asset)	\$1,108,729,132	(614,336)	3,317,373,005	2,353,800	65,993,498,688	19,225,658,673	38,659,583,951
Plan fiduciary net position as a percentage of the total pension liability	11.67%	115.25%	34.25%	30.90%	24.60%	58.78%	42.90%

The total pension liability was determined by actuarial valuations as of July 1, 2019, which was rolled forward to June 30, 2020, 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	N/A	2025	N/A	2026	All future years	2026
Rate	2.00%	N/A	2.95%	N/A	1.55% - 4.45% based on years of service	3.25 - 15.25% based on years of service	2.00 - 6.00% based on years of service
Thereafter	2.75%	N/A	3.95%	N/A	2.75% - 5.65% based on years of service	Not Applicable	3.00 - 7.00% based on years of service
Long-term expected rate of return	7.00%	2.21%	7.00%	2.21%	7.00%	7.00%	7.00%
Period of actuarial experience study upon which actuarial assumptions were 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
June 30, 2020

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-2020.	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-2020.	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-2020.
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-2020.	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-2020.
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-2020.	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-2020.	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-2020.
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-2020.	Not applicable as there are no disabled retirees.

Notes to Financial Statements June 30, 2020

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-2020.	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-2020.	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-2020.
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-2020.	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, unadjuste, for beneficiaries (contingent annuitants), with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2020	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-2020.
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-2020.	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-2020.	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-2020.

Notes to Financial Statements
June 30, 2020

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, 2020 are summarized in the following table:

Asset Class	JRS, SPRS, TPAF, PFRS and PERS	POPF &
	7.71%	<u> </u>
US Equity		_
Non-U.S. Developed Market Equity	8.57%	_
Emerging Market Equity	10.23%	_
Private Equity	11.42%	_
Real Assets	9.73%	
Real Estate	9.56%	_
High Yield	5.95%	_
Private Credit	7.59%	_
Investment Grade Credit	2.67%	_
Cash Equivalents	0.50%	0.50%
U.S. Treasuries	1.94%	_
Risk Mitigation Strategies	3.40%	_

Discount Rate

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

Plan	Discount Rate		
JRS	3.10%		
POPF	2.21%		
SPRS	5.00%		
CPFPF	2.21%		
TPAF	5.40%		
PFRS	7.00%		
PERS	7.00%		

Notes to Financial Statements
June 30, 2020

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 w hich the following rates w ere applied:							
Long-term expected rate of return	Through June 30, 2033	Not applicable	Through June 30, 2057	Not applicable	Through June 30, 2062	All periods	All periods
Municipal Bond rate*	From July 1, 2033 and thereafter	All periods	From July 1, 2057 and thereafter	All periods	From July 1, 2062 and thereafter	N/A	N/A

^{*} The municipal bond return rate used is 2.21%. 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 (2.10%, 3.10%, 4.10%)	\$ 1,259,754,679	1,108,729,132	982,133,050
POPF (1.21%, 2.21%, 3.21%)	(402,797)	(614,336)	(804,919)
SPRS (4.00%, 5.00%, 6.00%)	4,061,853,204	3,317,373,005	2,717,150,745
CPFPF (1.21%, 2.21%, 3.21%)	2,503,765	2,353,800	2,218,177
TPAF (4.40%, 5.40%, 6.40%)	77,517,093,055	65,993,498,688	56,425,087,777
PFRS (6.00%, 7.00%, 8.00%)	24,848,235,326	19,225,658,673	14,555,803,862
PERS (6.00%, 7.00%, 8.00%)	46,043,457,705	38,659,583,951	32,402,221,894

Notes to Financial Statements
June 30, 2020

(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, 2020 are as follows:

Total OPEB liability \$ 18,486,002,498
Plan fiduciary net position \$ 164,862,282

Net OPEB liability \$ 18,321,140,216

Plan fiduciary net position as a percentage of

the total OPEB liability 0.89%

The total OPEB liability was determined by an actuarial valuation as of July 1, 2019, which was rolled forward to June 30, 2020 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-2020

PFRS PUB-2010 Safety classification headcount-w eighted mortality table with fully

generation mortality improvement projections from the central year using Scale MP-2020

Long-term rate of return 2.21%

Actuarial assumptions used in the July 1, 2019 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
June 30, 2020

For pre-Medicare medical benefits, the trend is initially 5.6% and decreases to a 4.5% long-term trend rate after seven years. For post-65 medical benefits, the actual fully-insured Medicare Advantage trend rates for fiscal year 2021 through 2022 are reflected. The assumed post-65 medical trend is 4.5% for all future years. For prescription drug benefits, the initial trend rate is 6.75% and decreases to a 4.5% long-term trend rate after seven years.

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 2.21%. 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 (1.21%)	discount rate (2.21%)	increase (3.21%)
\$	21,677,290,971	18,321,140,216	15,666,313,249

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

	Healthcare Cost		
 1% Decrease	Trend Rate	1% Increase	
\$ 15,145,526,262	18,321,140,216	22,483,436,558	

Notes to Financial Statements
June 30, 2020

(5) Investments

Investments (including investments held directly by the Common Pension Funds) as of June 30, 2020 are as follows:

Common Pension Fund D:		
Cash	\$	125,198,471
Cash Management Fund	·	2,617,436,176
Domestic equities		21,490,325,482
International equities		14,456,822,544
Domestic fixed income		10,533,452,614
International fixed income		1,102,265,012
Other ⁽¹⁾		212,886,837
		50,538,387,136
Common Pension Fund E:		
Cash		55,124,364
Cash Management Fund		452,834,113
Private equity funds		8,480,113,319
Global diversified credit funds		4,701,550,357
Real estate funds		3,842,136,143
Absolute return strategy funds		3,100,974,112
Real assets		1,536,939,021
Opportunistic private equity investments		447,072,714
Domestic equities		352,973,598
Other ⁽¹⁾		12,029,218
		22,981,746,959
All Other Investments:		
Cash Management Fund		2,060,376,259
Domestic equities		771,156,887
Fixed income mutual funds		526,848,710
Equity mutual funds		3,527,822,808
		6,886,204,664
Total	\$	80,406,338,759

⁽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

Notes to Financial Statements
June 30, 2020

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 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	27.00%
Non-U.S. developed markets equity	13.50%
Private equity	13.00%
Emerging markets equity	5.50%
Global Growth	59.00%
Real Estate	8.00%
Real Assets	3.00%
Real Return	11.00%
Private Credit	8.00%
Investment grade credit	8.00%
High yield	2.00%
Income	18.00%
US Treasuries	5.00%
Cash equivalents	4.00%
Risk mitigation strategies	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 1.40% for JRS, SPRS, TPAF, PFRS, and PERS and 1.57% 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

Notes to Financial Statements
June 30, 2020

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.

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
June 30, 2020

The credit ratings and limits for the Pension Funds as of June 30, 2020 are as follows:

Limitation of issuer's

		Minimum rating	i	of issuer's 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	Ваа3	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	Ваа3	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
June 30, 2020

	M	linimum ratin	g	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	А3	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	А3	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.

39 (Continued)

fixed period of time.

Notes to Financial Statements
June 30, 2020

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, 2020 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	<u>B</u>	Caa	Ca	<u> </u>	Totals
Corporate obligations \$	542,970	885,967	3,956,716	292,287	293,550	324,654	125,571	5,373	687	6,427,775
U.S. Treasury bonds	3,597,218	_	_	_	_	_	_	_	_	3,597,218
Foreign government obligations	172,044	426,180	76,998	_	_	_	_	_	_	675,222
International corporate obligations	37,717	95,359	55,465	38,268	54,358	65,901	24,888	65	42	372,063
Federal agency obligations	242,100	_	_		_	_	_	_	_	242,100
Municipal obligations	_	75,505	7,063		_	_	_	_	_	82,568
Mortgages (FHLMC/FNMA/GNMA)	10,485	_	_	_	_	_	_	_	_	10,485
Other					174	287				461
\$	4,602,534	1,483,011	4,096,242	330,555	348,082	390,842	150,459	5,438	729	11,407,892

Notes to Financial Statements
June 30, 2020

Corporate obligations
Foreign government obligations
International corporate obligations
Asset backed securities

_		Standard	and Poor's	F					
	Α	BBB	BB	В	CCC	В	CCC	С	Totals
Φ.	440.000	20 502	F 222		0.070	25		217	400.050
Ф	118,908	36,503	5,333	_	2,370	25	_	217	163,356
	39,440	_	_	_	_	_	_	_	39,440
	_	4,933	4,576	1,371	2,663	857	678	_	15,078
	_	341	_	_	_	_	_	_	341
\$	158,348	41,777	9,909	1,371	5,033	882	678	217	218,215

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 \$536,460,082 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 \$5,130,646,548, 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, 2020 (in thousands):

	 Maturities in years								
				More	Total				
Fixed income investment type	 Less than 1	1-5	6-10	than 10	fair value				
Corporate obligations	\$ 125,607	1,744,779	2,400,459	2,328,016	6,598,861				
U.S. Treasury bonds	52,266	1,879,409	859,047	806,496	3,597,218				
Foreign government obligations	113,223	280,730	298,197	22,512	714,662				
International corporate obligations	11,333	191,056	153,096	32,117	387,602				
Federal agency obligations	_	242,100	_	_	242,100				
Municipal obligations	25,000	20,413	_	37,155	82,568				
Mortgages (FHLMC/FNMA/GNMA)	_	258	8,424	1,803	10,485				
Bank loans	_	461	_	_	461				
Asset backed securities	 			341	341				
	\$ 327,429	4,359,206	3,719,223	3,228,440	11,634,298				

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, 2020 were \$1,420,188 and \$526,848,710, respectively. These funds have a weighted average duration of 3.3 and 6.18 years, respectively.

Notes to Financial Statements
June 30, 2020

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, 2020 (expressed in thousands of U.S. dollars):

Currency		Equities	Fixed income	Alternative investments	Total fair value
Australian dollar	\$	595,996	_	_	595,996
Brazilian real	·	241,381		_	241,381
Canadian dollar		821,565	57,708	_	879,273
Chilean peso		20,765	, <u> </u>	_	20,765
Colombian peso		_	1,070	_	1,070
Czech koruna		15,887	_	_	15,887
Danish krone		195,417	_	_	195,417
Euro		2,460,516	30,158	775,810	3,266,484
Hong Kong dollar		1,467,306	_	_	1,467,306
Hungarian forint		27,894	_	_	27,894
Indonesian rupiah		90,178	_	_	90,178
Japanese yen		2,133,864	_	_	2,133,864
Malaysian ringgit		72,205	_	_	72,205
Mexican peso		76,178	_	_	76,178
New Israeli sheqel		28,104		_	28,104
New Taiwan dollar		12,874		_	12,874
New Zealand dollar		24,946		_	24,946
Norwegian krone		34,474		_	34,474
Pakistan rupee		1,134		_	1,134
Philippine peso		28,547		_	28,547
Polish zloty		35,716	_	_	35,716
Pound sterling (U.K)		1,186,772	1,206	84,139	1,272,117
Qatari rial		28,053	_	_	28,053
Singapore dollar		102,183	_	_	102,183
South African rand		188,446	_	_	188,446
South Korean won		599,169	_	_	599,169
Swedish krona		261,094	_	_	261,094
Swiss franc		802,090	_	_	802,090
Thailand baht		103,645	_	_	103,645
Turkish lira		39,606	_	_	39,606
UAE dirham		28,579			28,579
	\$	11,724,584	90,142	859,949	12,674,675

Notes to Financial Statements
June 30, 2020

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, 2020, the net position of Common Pension Fund E includes receivables of \$864 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, 2020, 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.

Notes to Financial Statements
June 30, 2020

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, 2020 (in thousands):

Repurchase agreements
State Street Navigator Securities Lending
Money Market Portfolio

	Rating							
	Aaa/AAA	Not rated	Totals					
\$	1,298,582	_	1,298,582					
_		117,896	117,896					
\$_	1,298,582	117,896	1,416,478					

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, 2020, the Pension Funds had outstanding loaned investment securities with an aggregate fair value of \$1,397,303,917 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.

Notes to Financial Statements
June 30, 2020

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.

Notes to Financial Statements
June 30, 2020

As of June 30, 2020, 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	595,258	\$ 669,072	670,659	(1,587)
Sell:				
Euro	26,231,538	29,708,708	29,481,884	226,824
Pound sterling	1,763,245	2,183,405	2,178,987	4,418
Total forward contracts		\$ 32,561,185	32,331,530	229,655

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
June 30, 2020

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, 2020, 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, 2020

The following table summarizes the fair value hierarchy of the investment portfolio as of June 30, 2020 (in thousands):

		Total	Level 1	Level 2
Investments at fair value				
Equity securities				
Domestic equities	\$	22,614,456	22,606,908	7,548
International equities		14,435,514	13,478,628	956,886
Equity mutual funds		3,527,823	3,527,823	_
Exchange traded funds		21,309	21,309	_
Total equity securities		40,599,102	39,634,668	964,434
Debt securities				
Corporate obligations		6,598,861	_	6,598,861
U.S. Treasury bonds		3,597,218	_	3,597,218
Foreign government obligations		714,662	_	714,662
International corporate obligations		387,602	_	387,602
Federal agency obligations		242,100	_	242,100
Fixed income mutual funds		526,849	526,849	_
Municipal obligations		82,568	_	82,568
Mortgages (FHLMC/FNMA/GNMA)		10,485	_	10,485
Exchanged traded funds		1,420	1,420	_
Asset backed securities		461	_	461
Bank loans		341	_	341
Total debt securities		12,162,567	528,269	11,634,298
Total investments by fair value level		52,761,669	40,162,937	12,598,732
Investments measured at the net asset value (NAV)				
Buyout private equity funds		7,041,124		
Global diversified credit funds		4,701,550		
Real estate funds - equity		3,214,329		
Multi-strategy hedge funds		1,748,860		
Real assets		1,536,939		
Debt related private equity funds		1,039,067		
Real estate funds - debt		627,807		
Credit oriented hedge funds		585,506		
Opportunistic hedge funds		578,264		
Opportunistic private equity investments		447,073		
Venture capital private equity funds		389,308		
Equity oriented hedge funds		188,344		
Secondary private equity funds		10,614		
Total investments measured at NAV		22,108,785		
Local Government Investment Pool		,,		
Cash Management Fund		5,130,646		
Total investments	\$	80,001,100		
Investment derivative instruments	⁺ —	22,23.,.00		
Foreign currency forward contracts (assets)		32,561	_	32,561
Foreign currency forward contracts (lassets)		(32,332)	_	(32,332)
Total investment derivative instruments	\$	229		229
rotal invostment derivative instruments	Ψ	223		223

Notes to Financial Statements
June 30, 2020

The following table represents the unfunded commitments, redemptions frequency and redemption notice period for investments measured at NAV as of June 30, 2020 (in thousands):

·	Fair Value	Unfunded Commitments*	Redemptions Frequency (if currently Eligible	Redemption Notice Period
Buyout private equity funds (1)	\$ 7,041,124	3,015,945	None	N/A
Global diversified credit funds (2)	4,701,550	1,153,698	Quarterly, semi- annual	45 and 90 days
Real estate funds - equity (3)	3,214,329	1,551,150	Quarterly	15 and 90 days
Multi-strategy hedge funds (4)	1,748,860	226,791	Quarterly, semi- annual	None
Real assets (5)	1,536,939	950,422	None	None
Debt related private equity funds (6)	1,039,067	514,578	None	N/A
Real estate funds - debt (7)	627,807	304,665	None	N/A
Credit oriented hedge funds (8)	585,506	_	None	N/A
Opportunistic hedge funds (9)	578,264	25,000	Monthly, quarterly	30-60 days
Opportunistic private equity funds (10)	447,073	325,546	None	N/A
Venture capital private equity funds (11)	389,308	94,334	None	N/A
Equity oriented hedge funds (12)	188,344	50,000	Quarterly, semi- annual, annually	65 days
Secondary private equity funds (13)	10,614	12,692	None	N/A
Total investments measured at NAV	\$ 22,108,785	8,224,821		

- 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 E, limiting the ability to draw down these unfunded balances.
- 1. Buyout private equity funds include investments in 80 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 12 years.
- 2. Global diversified credit funds include investments in 18 funds and separate account investments that make investment in mezzanine debt, credit structured products, commercial and residential

49

Notes to Financial Statements

June 30, 2020

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, 2020, these remaining redemption restriction periods range from 1 to 5 years. It is expected that the underlying assets will be liquidated over the next 1 to 10 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 76% 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 23% of the value of the investments cannot be redeemed because the investment includes restrictions that do not allow for redemptions. As of June 30, 2020, the remaining redemption restriction periods range from 6 months to 2 years. Five of the investments are being liquidated as part of the redemption process.
- 5. Real asset funds includes investments in 17 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 13 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 1 to 9 years.
- 7. 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

Notes to Financial Statements
June 30, 2020

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 6 years.

- 8. Credit oriented hedge funds include investments in 6 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.
- 9. Opportunistic hedge funds include investments in 4 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 59% of the value of the investments in this type cannot be redeemed because the investments include restrictions. As of June 30, 2020, this remaining redemption restriction period is 1 year.
- 10. 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.
- 11. Venture capital private equity funds include investments in 8 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 6 months to 4 years of the investment.
- 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

Notes to Financial Statements
June 30, 2020

ended June 30, 2012. At June 30, 2020, the remaining receivable balances related to P.L. 2009, C. 19 were \$70.2 million and \$23.2 million for PFRS and PERS, respectively.

(10) State Employer's Contribution Receivable

At June 30, 2020, a receivable of \$684.2 million was recorded, which represents the State's 4th quarter pension contribution, which was not paid until after year-end. Of the receivable recorded, the portion of the State's contribution related to its nonemployer share of the TPAF, PFRS, and PERS contributions were \$358.8 million, \$38.6 million, and \$2.0 million, respectively.

(11) 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 (\$98,722,906); SPRS (\$241,751,699); TPAF (\$15,061,762,793); PFRS (\$4,093,007,684); PERS (\$16,287,885,567)

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 (\$-94,945,667); SPRS (\$1,071,331,439); TPAF (\$-36,205,524,675); PERS (\$-23,639,923,857)

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 (\$142,651,604); SPRS (\$414,678,407); TPAF (\$42,672,941,880); PFRS (\$29,418,428,809); PERS (\$36,257,075,650)

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 (7.5% for State fiscal year 2020) is credited to the Retirement Reserve.

Retirement Reserve - POPF (\$4,643,012)

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.

Notes to Financial Statements
June 30, 2020

Non-Contributory Group Insurance Premium Reserve – PFRS – Local (\$62,418,619); PERS – Local (\$82,268,987)

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.

Pension Accumulation Reserve – PFRS (\$-6,161,727,267)

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 (\$1,052,727)

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

Benefit Enhancement Reserve – PERS – Local (\$58,062,955)

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 (\$164,862,282)

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 (\$4,604,618,693); SACT (\$183,058,290)

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 (\$45,013,332)

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.

Notes to Financial Statements
June 30, 2020

Various reserve balances as of June 30, 2020 are as follows:

			Postemployment Benefit Plan
	Pension	n Reserves	Reserves
Members' Annuity Savings Reserve and Accumulated			
Interest Reserve	\$ 35,78	33,130,649	_
Contingent Reserve	(58,86	9,062,760)	_
Retirement Reserve	108,91	0,419,362	_
Non-Contributory Group Insurance Premium Reserve	14	14,687,606	_
Pension Accumulation Reserve	(6,16	31,727,267)	_
Pension Reserve		1,052,727	_
Benefit Enhancement Reserve	5	8,062,955	_
SHBP Reserve			164,862,282
Variable Accumulation Reserve	4,78	37,676,983	· · · · · · · · · · · · · · · · · · ·
Variable Benefits Reserve	· ·	15,013,332	
Total	\$ 84,69	99,253,587	164,862,282

(12) 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.

4.58%

7.90%

STATE OF NEW JERSEY DIVISION OF PENSIONS AND BENEFITS

Required Supplementary Information

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

Judicial Retirement System

(Unaudited)

June 30, 2020

	_	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	\$	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		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	_	1,110,222,406	922,019,220	937,395,995	980,742,106	878,964,581	900,743,760	850,984,555
Total pension liability-ending (a)	\$_	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	\$	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		(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) Plan's net pension liability-ending (a)-(b)	\$_	157,864,193 146,428,843 1,108,729,132	167,724,348 157,864,193 952,358,213	175,325,333 167,724,348 754,294,872	179,999,820 175,325,333 762,070,662	212,783,371 179,999,820 800,742,286	231,483,835 212,783,371 666,181,210	225,830,817 231,483,835 669,259,925
Plan fiduciary net position as a percentage of the total pension liability		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	\$	76,627,036 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 si	how in	formation for 10 years	s. Additional years will b	ne displayed as they be	ecome available.			
Notes to Schedule:								
Changes in benefit terms:		None						

4.07%

7.00%

4.09%

7.00%

3.83%

7.00%

3.11%

7.65%

3.10%

7.00%

See accompanying independent auditors' report.

Changes in assumptions:

Long-term expected rate of return

Discount rate

55 (Continued)

4.12%

7.90%

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

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 and Related Ratios - Defined Benefit Pension Plans

Prison Officers' Pension Fund

(Unaudited)

June 30, 2020

		2020	2019	2018	2017	2016	2015	2014
Total pension liability:								
Service cost	\$	_	_	_	_	_	_	_
Interest on total pension liability		152,968	188,032	215,068	198,788	251,254	331,362	401,659
Effect of economic/demographic (gains) or losses		(339,022)	127,146	(407,471)	82,047	96,657	(296,620)	_
Effect of assumptions changes or inputs		204,867	(36,496)	(73,662)	(240,233)	1,171,953	163,490	129,449
Benefit payments		(715,168)	(816,972)	(947,877)	(1,069,209)	(1,240,307)	(1,377,505)	(1,583,408)
Net change in total pension liability		(696,355)	(538,290)	(1,213,942)	(1,028,607)	279,557	(1,179,273)	(1,052,300)
Total pension liability-beginning	_	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)	\$	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	\$	361,956	412,250	484,565	552,131	634,217	698,360	793,174
Net investment income		74,920	111,413	70,215	30,847	18,067	6,355	7,368
Benefit payments, including refunds of employee contributions		(715,168)	(816,972)	(947,877)	(1,069,209)	(1,240,307)	(1,377,505)	(1,583,408)
Administrative expense		(4,628)	(4,215)	(4,315)	(4,134)	(5,312)	(5,843)	(5,853)
Net change in Plan fiduciary net position		(282,920)	(297,524)	(397,412)	(490,365)	(593,335)	(678,633)	(788,719)
Plan fiduciary net position-beginning		4,925,932	5,223,456	5,620,868	6,111,233	6,704,568	7,383,201	8,171,920
Plan fiduciary net position-ending (b)		4,643,012	4,925,932	5,223,456	5,620,868	6,111,233	6,704,568	7,383,201
Plan's net pension liability-ending (a)-(b)	\$	(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		115.25%	104.25%	99.24%	86.78%	81.42%	92.78%	87.84%
Covered-employee payroll		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net pension liability as a percentage of covered-employee payroll		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:
 2.21%
 3.50%
 3.87%
 3.58%
 2.85%
 3.80%
 4.29%

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

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.

See accompanying independent auditors' report.

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, 2020

	_	2020	2019	2018	2017	2016	2015	2014
Total pension liability:								
Service cost	\$	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		253,377,036	240,494,663	226,928,605	202,545,532	221,675,495	216,980,562	209,010,706
Effect of economic/demographic (gains) or losses		6,595,373	(11,528,958)	(19,592,172)	23,786,696	(17,580,385)	35,245,543	_
Effect of assumptions changes or inputs		303,378,361	(333,811,404)	(379,490,284)	(697,970,471)	747,941,075	435,691,094	92,686,900
Transfers from other systems		305,306	(39,834)	190,903	3,925	54,000	222,557	(407.050.000)
Benefit payments	-	(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		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	_	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)	\$	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	\$	117,911,260	98,182,956	74,603,780	53,006,614	37,435,541	38,527,297	36,436,923
Contributions-employee		24,292,258	24,183,990	22,416,571	23,721,785	22,818,295	22,315,431	24,034,496
Net investment (loss) income		24,733,948	105,696,140	154,029,009	207,401,590	(19,284,054)	75,532,779	287,098,217
Net transfers from other systems		305,306	(39,834)	190,903	3,925	54,000	222,557	
Benefit payments, including refunds of employee contributions		(230,638,032)	(225,682,230)	(222,315,723)	(217,303,946)	(213,436,150)	(206,493,624)	(197,958,938)
Administrative expense	_	(632,762)	(596,137)	(377,193)	(294,745)	(334,630)	(351,724)	(280,026)
Net change in Plan fiduciary net position		(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		1,791,789,567	1,790,044,682	1,761,497,335	1,694,962,112	1,867,709,110	1,937,956,394	1,788,625,722
Plan fiduciary net position-ending (b)	_	1,727,761,545	1,791,789,567	1,790,044,682	1,761,497,335	1,694,962,112	1,867,709,110	1,937,956,394
Plan's net pension liability-ending (a)-(b)	\$_	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		34.25%	38.78%	36.91%	34.38%	29.87%	38.74%	45.64%
Covered-employee payroll	\$	296,189,926	275,790,087	284,707,387	277,771,135	275,477,457	262,496,289	262,063,829
Net pension liability as a percentage of covered-employee payroll	·	1,120.02%	1,025.44%	1,074.67%	1,210.63%	1,444.31%	1,125.27%	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 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% 7.65% 7.90% 7.90%

See accompanying independent auditors' report.

For 2020, the Scale MP-2020 was used for mortaliity improvement.

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.

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, 2020

		2020	2019	2018	2017	2016	2015	2014
Total pension liability: Service cost Interest on total pension liability Effect of economic/demographic (gains) or losses	\$	134,753 (277,515)			260,211 (984,588)	352,889 (71,313)		632,080 —
Effect of assumptions changes or inputs Benefit payments	_	147,999 (889,923)	(375,356) (1,033,175)	(70,518) (1,289,899)	(236,022) (1,535,623)	1,273,909 (1,881,252)	193,719 (2,445,627)	163,528 (2,942,035)
Net change in total pension liability		(884,686)	(1,404,389)	(1,701,011)	(2,496,022)	(325,767)	(2,741,370)	(2,146,427)
Total pension liability-beginning		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)	\$	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 Net change in Plan fiduciary net position	\$	17,129 541,279 (889,923) (3,308) (334,823)	28,518 631,757 (1,033,175) (3,013) (375,913)	325,000 21,542 806,330 (1,289,899) (4,006) (141,033)	575,000 10,099 964,280 (1,535,623) (4,188) 9,568	148,000 10,856 1,196,017 (1,881,252) (6,643) (533,022)	198 1,577,751 (2,445,627) (8,003) (875,681)	11,740 585 1,889,091 (2,942,035) (9,566) (1,050,185)
Plan fiduciary net position-beginning Plan fiduciary net position-ending (b)		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)	\$	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	′	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

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:
 2.21%
 3.50%
 3.87%
 3.58%
 2.85%
 3.80%
 4.29%

See accompanying independent auditors' report.

For 2020, the Scale MP-2020 was used for mortaliity improvement.

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, 2020

		2020	2019	2018	2017	2016	2015	2014
Total pension liability:								
Service cost Interest on total pension liability Changes of benefit terms	\$	1,643,902,335 4,680,942,056 (16,738,469)	1,882,081,572 4,201,672,382	2,229,422,113 3,858,188,355 —	3,028,689,581 3,304,988,177	2,344,321,810 3,694,844,118	2,022,411,197 3,797,032,970	1,870,901,832 3,794,362,523
Effect of economic/demographic (gains) or losses Effect of assumptions changes or inputs Transfers from other systems Benefit payments		(8,596,840) 1,613,054,603 9,417,333 (4,615,149,051)	(155,621,840) (4,005,548,119) 6,655,677 (4,510,860,239)	1,195,858,381 (6,816,855,725) 5,686,293 (4,401,203,131)	236,377,556 (13,285,524,000) 1,338,431 (4,306,268,745)	(134,644,168) 10,827,093,000 1,564,002 (4,169,070,762)	365,228,279 5,913,556,000 4,117,141 (4,015,003,587)	(24,898,221) 2,614,173,709 — (3,837,859,513)
Net change in total pension liability	_	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		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)	\$	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	\$	2,109,340 2,268,898,389	2,050,414 2.013.446.234	1,723,827 1.514.407.623	1,404,292 1,125,614,188	1,105,810 798,963,467	807,246 539,796,289	4,688,045 423.012.101
Contributions-employee		867,037,595	846,166,328	810,899,751	790,788,033	761,711,695	740,296,265	716,183,306
Net investment (loss) income		318.393.101	1.361.781.295	2.016.316.929	2.736.988.791	(267,684,353)	1.066.062.926	4,100,273,453
Net transfers from other systems		9,417,333	6,655,677	5,686,293	1,338,431	1,564,002	4,117,141	
Employer specific contributions - delayed appropriation and		-, ,	.,,	-,,	,,	,,	, ,	
delayed enrollments		329,570	300,112	345,897	357,659	243,660	358,899	_
Benefit payments, including refunds of employee contributions Administrative expense	_	(4,615,149,051) (18,590,555)	(4,510,860,239) (13,922,385)	(4,401,203,131) (13,222,178)	(4,306,268,745) (11,923,787)	(4,169,070,762) (13,768,112)	(4,015,003,587) (13,890,080)	(3,837,859,513) (12,170,971)
Net change in Plan fiduciary net position		(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)		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)	\$	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		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	\$	11,061,603,138 596.60%	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.

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	5.40%	5.60%	4.86%	4.25%	3.22%	4.13%	4.68%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2020, the Scale MP-2020 was used for mortaliity improvement.

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 males, and a 100.3% adjustment for males, and with improvement from the base year of 2010 on a generational basis was used. For 2019 mortality improvement,

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

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, 2020

	_	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	\$	890,425,657 3,131,523,540 67,509,143 (892,759,358) 2,350,928 (2,725,565,718)	958,392,935 3,025,500,679 (138,356,304) (1,875,170,696) 3,239,769 (2,606,863,711)	1,030,735,624 2,898,092,706 47,676,088 (2,069,626,924) 3,422,888 (2,523,462,466)	1,136,338,028 2,738,598,309 89,364,940 (3,534,553,975) 289,960 (2,421,485,437)	1,148,613,712 2,751,445,220 (34,916,637) 343,078,737 358,929 (2,324,175,953)	994,248,683 2,680,664,300 (215,122,438) 3,755,474,472 800,782 (2,205,464,297)	1,079,166,175 2,535,619,539 — 649,814,155 — (2,105,829,011)
Net change in total pension liability	_	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	_	46,164,302,326	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)	\$	46,637,786,518	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 Contributions-nomemployer Contributions-nomemployer Contributions-nomemployee Net investment (loss) income Net transfers from other systems Employer specific contributions - additional contribution Employer specific contributions - delayed appropriation Employer specific contributions - delayed enrollments Employer specific contributions - retroactive Contributions-other Benefit payments, including refunds of employee contributions Administrative expense	\$	1,352,498,105 154,309,000 416,433,179 425,543,356 2,350,928 997,622 603,835 165,704 5,230,213 (2,725,565,718) (12,859,324)	1,206,535,544 130,202,000 410,943,242 1,549,138,833 3,239,769 847,716 422,890 96,603 6,501,177 (2,606,863,711) (7,199,218)	1,127,617,114 108,857,000 395,604,883 2,139,481,226 3,422,888 173,554 450,244 90,933 3,120,240 (12,230) (2,523,462,466) (4,505,685)	1,002,043,734 86,467,000 395,878,384 2,791,104,860 268,910 892,514 179,386 11,476,881 (2,421,485,437) (4,124,457)	900,033,567 61,466,000 388,681,408 (150,693,159) 388,629 1,923,531 763,176 142,034 3,661,101 (2,324,175,953) (4,292,891)	883,776,917 76,038,000 386,991,641 922,598,676 800,782 535,424 865,936 224,629 24,536,440 (2,205,464,297) (4,531,012)	858,047,628 — 385,660,096 3,381,553,869 — — — (2,105,829,011) (3,884,342)
Net change in Plan fiduciary net position		(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 Plan fiduciary net position-ending (b)	_	27,792,420,945 27,412,127,845	27,098,556,100 27,792,420,945	25,847,718,399 27,098,556,100	23,984,726,664 25,847,718,399	25,106,858,921 23,984,726,664	25,020,485,785 25,106,858,921	22,504,937,545 25,020,485,785
Plan's net pension liability-ending (a)-(b)	\$_	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		58.78%	60.20%	57.91%	54.52%	48.55%	52.84%	58.86%
Covered-employee payroll Net pension liability as a percentage of covered-employee payroll	\$	3,937,977,209 488.21%	3,870,718,707 474.64%	3,803,348,329 517.94%	3,726,807,562 578.59%	3,695,509,355 687.79%	3,682,677,356 608.55%	3,678,910,266 475.32%
Schedule is intended to	show	information for 10 yea	ars. Additional years will	be displayed as they b	become available.			

Notes to Schedule:

Changes in benefit terms: None Changes in assumptions: 7.00% 6.85% 6.51% 6.14% 5.55% 5.79% 6.32% Discount rate Long-term expected rate of return 7.00% 7.00% 7.00% 7.00% 7.65% 7.90% 7.90%

For 2020, the Scale MP-2020 was used for mortaliity improvement.

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-2010 Safety Employee mortality table with a 105.6% adjustment for males and of 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-2010 Safety Retiree Below-Median Income Weighted mortality, does with a 96.7% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For beneficiaries mortality, the Pub-2010 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-2010 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) through 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.

See accompanying independent auditors' report.

Required Supplementary Information

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

Public Employees' Retirement System

(Unaudited)

June 30, 2020

	_	2020	2019	2018	2017	2016	2015	2014
Total pension liability: Service cost	\$	1,298,089,823	1,330,518,589	1,555,424,045	1,865,398,219	1,628,065,678	1,523,631,386	1,592,214,831
Interest on total pension liability Changes of benefit terms		4,408,636,380 (27,350,963)	4,084,253,310 —	3,849,650,265	3,412,789,012 —	3,653,373,426 —	3,647,688,354	3,506,486,225
Effect of economic/demographic (gains) or losses Effect of assumptions changes or inputs		799,902,851 (5,511,377,388)	137,159,950 (3,283,548,860)	(363,908,216) (5,613,718,254)	306,941,390 (10,156,789,076)	600,806,505 8,792,817,065	1,050,795,158 4,091,557,460	 1,222,437,554
Transfers from other systems Benefit payments	_	(14,123,679) (4,253,053,912)	(11,955,594) (4,118,371,422)	(13,217,000) (3,936,320,575)	854,976 (3,810,818,692)	778,753 (3,629,651,915)	1,651,542 (3,441,046,065)	(3,259,290,114)
Net change in total pension liability		(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	_	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)	\$	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:	\$	0.400.700.700	4 000 700 040		4 405 004 570	4 070 405 040		0.7 000 000
Contributions-employer Contributions-nonemployer	\$	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		908,936,226	909,191,554	854,178,790	847,952,137	821,305,787	805,232,235	797,818,225
Net investment (loss) income		456,271,235	1,741,296,887	2,435,763,559	3,202,393,837	(237,215,643)	1,117,827,113	4,102,964,869
Net transfers from other systems		(14,123,679)	(11,955,594)	(13,217,000)	854,976	778,753	1,651,542	_
Employer specific contributions - additional contribution		102,853	103,872	28,566	25,676	257,850	111,824	_
Employer specific contributions - delayed appropriation		(4,146,446)	1,775,826	2,687,967	3,224,612	1,721,199	1,664,415	_
Employer specific contributions - delayed enrollments		567,434	657,701	931,611	1,030,774	532,612	594,843	_
Employer specific contributions - retroactive		5,318,876	4,623,577	4,818,841	11,230,521	687,225	6,504,878	_
Contributions - other		_	2,387	_	(7,797)	(51,586)	(31,006)	_
Benefit payments, including refunds of employee contributions		(4,253,053,912)	(4,118,371,422)	(3,936,320,575)	(3,810,818,692)	(3,629,651,915)	(3,441,046,065)	(3,259,290,114)
Administrative expense	_	(19,365,010)	(21,257,441)	(21,368,150)	(19,648,715)	(23,285,920)	(23,761,860)	(21,756,019)
Net change in Plan fiduciary net position		(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		29,847,977,666	29,472,374,536	28,464,239,518	26,762,070,610	28,553,566,906	28,999,581,773	26,462,155,812
Plan fiduciary net position-ending (b)	_	29,045,369,302	29,847,977,666	29,472,374,536	28,464,239,518	26,762,070,610	28,553,566,906	28,999,581,773
Plan's net pension liability-ending (a)-(b)	\$	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		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	\$	11,775,149,674 328.32%	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 nor for retirement or death.

Changes in assumptions:

Discount rate	7.00%	6.28%	5.66%	5.00%	3.98%	4.90%	5.39%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2020, the Scale MP-2020 was used for mortaliity improvement.

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 99.7% 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 most 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 5.16% (based on age) for each fiscal year therefalter.

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
			Judicial Reti	rement System		
Year ended J	une 30:					
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 Office	rs' Pension Fund		
Year ended J	une 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
2015		_	_	_	N/A	N/A
2014		_	_	_	N/A	N/A
2013		_	_	_	N/A	N/A
2012		_	_	_	N/A	N/A
2011		_	_	_	N/A	N/A
			State Police R	etirement System		
Year ended J	une 30:					
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
2014		105,093,378	36,436,923	(68,656,455)	262,063,829	13.90
2013		99,876,582	27,777,047	(72,099,535)	283,216,927	9.81
2012		98,869,662	13,545,607	(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	etermined nonemployer e		Covered payroll	Contribution as a percentage of covered payroll	
		Co	nsolidated Police an	d Firemen's Pension	Fund		
Year ended	June 30	:					
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' Pensic	on and Annuity Fund			
Year ended	June 30	:					
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	:					
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	

Required Supplementary Information

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

	Actuarially determined contribution		Actual employer & Contribution nonemployer excess contribution (deficiency)		Covered payroll	Contribution as a percentage of covered payroll	
			Public Employees	' Retirement System	ı		
Year ended J	une 30:	:					
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 Five-year smoothed method with write-up	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							
2016 through 2020 Initial fiscal year applied through	2025	N/A^	2025	N/A^	2026	2025	2026
Rate	2.00%	N/A^	2.95%	N/A^	1.55% - 3.80% 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*
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:			
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, 2020

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

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

Changes in assumptions:

- 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 table with fully generational mortality improvement projections from the central year using Scale MP-2019 was used. For 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.
- 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:

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, 2020

		JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Personnel services:										
Salaries and wages	\$	81,745	1,716	176,489	1,393	5,975,586	3,383,767	8,430,890	176,248	18,227,834
Employee benefits		20,071	823	82,178	549	1,994,528	1,586,942	3,290,994	75,123	7,051,208
Total personnel		<u> </u>		<u> </u>						
services		101,816	2,539	258,667	1,942	7,970,114	4,970,709	11,721,884	251,371	25,279,042
Professional services:										
Actuarial services		25,799	153	43,457	110	236,961	237,439	408,730	_	952,649
Data processing		26,958	270	59,315	129	770,612	721,331	1,232,007	84,002	2,894,624
Information systems		32,722	310	63,609	161	780,132	707,654	1,407,088	78,647	3,070,323
Other professional (1)		3,744	204	52,395	103	788,941	730,112	1,454,057	· —	3,029,556
Medical reviews (exams/hearings)		_	_	52,059	_	241,921	189,005	602,350	_	1,085,335
Elections		_	_	_	_	_	107,384	137,562	_	244,946
Internal audit and legal	_	23,269	178	59,334	122	774,613	606,358	1,167,233		2,631,107
Total professional										
services	_	112,492	1,115	330,169	625	3,593,180	3,299,283	6,409,027	162,649	13,908,540
Communication:										
Travel		21	5	122	_	4,711	1,688	7,214	_	13,761
Telephone		2,900	510	3,001	420	140,787	40,233	214,111	3,112	405,074
Postage		2,284	64	33,551	54	521,321	186,816	798,273	3,000	1,545,363
Motor pool		26	_	176	_	7,002	2,509	10,722	_	20,435
Printing and office		357	15	2,116	13	81,417	29,176	124,669		237,763
Total communication		5,588	594	38,966	487	755,238	260,422	1,154,989	6,112	2,222,396
Miscellaneous:										
Office space		_	159	34,288	103	889,123	318,652	1,361,563	_	2,603,888
Maintenance		_	11	1,227	10	49,175	27,081	80,450	_	157,954
Equipment		_	208	2,669	140	102,662	36,789	157,202	_	299,670
Other services and charges		20	2	537	11	4,164	4,508,436	6,811	22,000	4,541,971
Total miscellaneous		20	380	38,721	254	1,045,124	4,890,958	1,606,026	22,000	7,603,483
Total administrative										
expenses	\$	219,916	4,628	666,523	3,308	13,363,656	13,421,372	20,891,926	442,132	49,013,461

(1) Portion of consulting

Schedule of Investment Expenses

Year ended June 30, 2020

_	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Investment expense \$	25,211	608	278,133	141	3,522,738	4,052,806	4,379,203	184,814	12,443,654

Schedule of Expenses for Consultants

Year ended June 30, 2020

		JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	Total
Actuarial: Cheiron Professional services:	\$	25,799	153	43,457	110	236,961	237,439	408,730	952,649
Medical reviews (exams/hearing Board elections:	gs)	_	_	52,059	_	241,921	189,005	602,350	1,085,335
Election America	_						107,384	137,562	244,946
Total expenses for consultants	\$	25,799	153	95,516	110	478,882	533,828	1,148,642	2,282,930

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

June 30, 2020

Assets: Cash and cash equivalents \$	Judicial Retirement System 379,896	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
Receivables:	,	- ,	,	, , , ,	.,,.	, , , , , , ,	-, - ,	-, -,
Contributions:								
Members	458,752	_	1,122,475	_	90,067,355	55,812,952	61,756,358	209,217,892
Employers and nonemployer	9,189,865	_	29,115,653	_	499,637,216	1,306,657,812	1,398,738,752	3,243,339,298
Accrued interest and dividends	2,763	39	10,976	49	229,807	3,804,535	205,077	4,253,246
Other	503,050	31,614	794,742	159,906	33,118,131	5,729,483	19,544,266	59,881,192
Total receivables	10,154,430	31,653	31,043,846	159,955	623,052,509	1,372,004,782	1,480,244,453	3,516,691,628
Investments, at fair value:								
Cash Management Fund	8,625,431	4,650,292	33,353,739	958,559	486,282,026	667,963,227	591,389,692	1,793,222,966
Common Pension Fund D	89,829,262	_	1,146,031,194	_	14,150,532,031	16,584,637,809	18,567,356,840	50,538,387,136
Common Pension Fund E	42,500,206		526,451,135		6,514,986,694	7,500,563,862	8,397,245,062	22,981,746,959
Total investments	140,954,899	4,650,292	1,705,836,068	958,559	21,151,800,751	24,753,164,898	27,555,991,594	75,313,357,061
Securities lending collateral	2,518,548	_	32,131,335	_	396,739,193	464,984,342	520,573,937	1,416,947,355
Members' loans and mortgages	244,322		10,957,926		263,806,406	1,522,588,879	537,229,281	2,334,826,814
Total assets	154,252,095	4,714,416	1,780,249,316	1,137,647	22,446,036,736	28,120,357,565	30,107,176,351	82,613,924,126
Liabilities:								
Accounts payable and accrued expenses	191	461	43,860	2,276	112,921,154	7,585,964	143,200,140	263,754,046
Retirement benefits payable	5,022,854	65,707	19,242,894	79,195	385,051,609	227,993,747	359,639,908	997,095,914
Noncontributory group life insurance premiums payable	37,365	_	135,653	_	5,389,614	7,819,466	13,294,120	26,676,218
Administrative expense payable	245,127	5,236	944,656	3,449	16,886,394	_	25,271,129	43,355,991
Securities lending collateral and rebates payable	2,517,715		32,120,708		396,607,967	464,830,543	520,401,752	1,416,478,685
Total liabilities	7,823,252	71,404	52,487,771	84,920	916,856,738	708,229,720	1,061,807,049	2,747,360,854
Net position restricted for pensions \$	146,428,843	4,643,012	1,727,761,545	1,052,727	21,529,179,998	27,412,127,845	29,045,369,302	79,866,563,272

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

Year ended June 30, 2020

	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	\$ 9,239,505	_	24,292,258	_	867,037,595	54,985,258	345,896,206	1,301,450,822
Local	_	_	_	_	_	361,447,921	563,040,020	924,487,941
Employers:	07.400.440		447.044.000		0.400.040	005 000 040	4 044 047 407	4 407 500 400
State Local	37,496,113	_	117,911,260	_	2,109,340	235,226,212 1,117,271,893	1,014,817,197 1,093,949,563	1,407,560,122 2,211,221,456
Nonemplover	_	_	_	_	2.268.898.389	154,309,000	8,117,299	2,431,324,688
Employer specific and other	_	361,956	_	541,278	329,570	6,997,374	1,842,717	10,072,895
Total contributions	46,735,618	361,956	142,203,518	541,278	3,138,374,894	1,930,237,658	3,027,663,002	8,286,117,924
	40,733,010	301,300	142,203,310	541,270	3,100,374,034	1,930,237,030	3,027,003,002	0,200,117,324
Investment income:								
Net increase in fair value of investments	(1,012,368)	75 500	(127,080,354)		(170,692,049)	(180,484,772)	(199,246,573)	(678,516,116)
Interest	3,009,894	75,528	152,092,435	17,270	492,607,888	610,080,934	659,897,011	1,917,780,960
	1,997,526	75,528	25,012,081	17,270	321,915,839	429,596,162	460,650,438	1,239,264,844
Less investment expense	25,211	608	278,133	141	3,522,738	4,052,806	4,379,203	12,258,840
Net investment income	1,972,315	74,920	24,733,948	17,129	318,393,101	425,543,356	456,271,235	1,227,006,004
Transfers	1,025,802		331,647		15,588,379	2,857,249	6,047,229	25,850,306
Total additions	49,733,735	436,876	167,269,113	558,407	3,472,356,374	2,358,638,263	3,489,981,466	9,538,974,234
Deductions: Benefits:								
Benefit expense - retirement allowances	60,022,314	715,168	228,515,032	889,922	4,506,883,034	2,670,939,487	4,042,247,883	11,510,212,840
Noncontributory group insurance expense	886,113	_	1,991,260	_	42,513,729	45,645,395	83,662,877	174,699,374
Refunds of contributions	40,682	_	131,740	_	65,752,288	8,980,837	127,143,151	202,048,698
Transfers	_	_	26,341	_	6,171,046	506,320	20,170,908	26,874,615
Administrative and miscellaneous expenses	219,976	4,628	632,762	3,308	18,590,555	12,859,324	19,365,011	51,675,564
Total deductions	61,169,085	719,796	231,297,135	893,230	4,639,910,652	2,738,931,363	4,292,589,830	11,965,511,091
Change in net position	(11,435,350)	(282,920)	(64,028,022)	(334,823)	(1,167,554,278)	(380,293,100)	(802,608,364)	(2,426,536,857)
Net position restricted for pensions:								
Beginning of year	157,864,193	4,925,932	1,791,789,567	1,387,550	22,696,734,276	27,792,420,945	29,847,977,666	82,293,100,129
End of year	\$ 146,428,843	4,643,012	1,727,761,545	1,052,727	21,529,179,998	27,412,127,845	29,045,369,302	79,866,563,272

Combining Schedule of Balance Sheet Information Fiduciary Funds – Agency Funds

June 30, 2020

	_	Alternate Benefit Program Fund	Pension Adjustment Fund	Dental Expense Program Fund	Total Agency Funds
Assets:	ф	0.000.000	4.750	4 407 500	2 772 200
Cash and cash equivalents	\$	2,283,883	1,753	1,487,586	3,773,222
Receivables:					
State related employer contributions		_	144,747	_	144,747
Other	_	45,537,187	2,737	3,353,496	48,893,420
Total receivables	_	45,537,187	147,484	3,353,496	49,038,167
Investments, at fair value:					
Cash Management Fund	_	425,747	1,988,268	72,408,214	74,822,229
Total investments	_	425,747	1,988,268	72,408,214	74,822,229
Total assets	\$ _	48,246,817	2,137,505	77,249,296	127,633,618
Liabilities:					
Accounts payable and accrued expenses	\$	45,507,071		77,249,296	122,756,367
Assets held for local contributing employers		_	1,906,984	_	1,906,984
Pension adjustment payroll payable		_	69,658	_	69,658
Due to State of New Jersey		2,739,746	47,091		2,786,837
Due to other funds	_		113,772		113,772
Total liabilities	\$ _	48,246,817	2,137,505	77,249,296	127,633,618

Combining Schedule of Changes in Fiduciary Net Position Information Fiduciary Funds – Agency Funds

Year ended June 30, 2020

	P	Alternate Benefit rogram Fund	Pension Adjustment Fund	Dental Expense Program Fund	Total Agency Funds
Additions: Contributions:	•	0.45.0.40		440.047.000	447 000 474
Members Employers	\$ 	845,843 218,943,773	844,646	116,247,328 35,388,283	117,093,171 255,176,702
Total contributions		219,789,616	844,646	151,635,611	372,269,873
Investment income: Interest	_	7,096	30,450	926,000	963,546
Total investment income	_	7,096	30,450	926,000	963,546
Total additions	_	219,796,712	875,096	152,561,611	373,233,419
Deductions: Benefits Refunds of contributions		219,641,825 154,887	1,004,078 (128,982)	122,502,523 30,059,088	343,148,426 30,084,993
Total deductions	_	219,796,712	875,096	152,561,611	373,233,419
Change in net position		_			_
Net position – beginning of year					
Net position – end of year	\$				

Combining Schedule of Balance Sheet Information Agency Fund – Dental Expense Program Fund

June 30, 2020

	_	State	Local	Total Agency Fund – Dental Expense Program Fund
Assets:				
Cash and cash equivalents	\$	1,314,720	172,866	1,487,586
Receivables: Other	_	3,262,190	91,306	3,353,496
Total receivables	_	3,262,190	91,306	3,353,496
Investments, at fair value:				
Cash Management Fund	_	50,883,918	21,524,296	72,408,214
Total investments	_	50,883,918	21,524,296	72,408,214
Total assets	\$_	55,460,828	21,788,468	77,249,296
Liabilities:				
Accounts payable and accrued expenses	\$ _	55,460,828	21,788,468	77,249,296
Total liabilities	\$	55,460,828	21,788,468	77,249,296

Combining Schedule of Changes in Fiduciary Net Position Information Agency Fund – Dental Expense Program Fund

Year ended June 30, 2020

				Total Agency Fund – Dental Expense
	_	State	Local	Program Fund
Additions:				
Contributions:				
Members	\$	60,924,743	55,322,585	116,247,328
Employers	_	30,388,363	4,999,920	35,388,283
Total contributions	_	91,313,106	60,322,505	151,635,611
Investment income: Net decrease in fair value of investments				_
Interest	_	727,879	198,121	926,000
Total investment income	_	727,879	198,121	926,000
Total additions		92,040,985	60,520,626	152,561,611
Deductions:				
Benefits		74,636,013	47,866,510	122,502,523
Refunds of contributions		17,404,972	12,654,116	30,059,088
Total deductions	_	92,040,985	60,520,626	152,561,611
Change in net position		_	_	_
Net position – beginning of year	_			
Net position – end of year	\$ _			

Schedule of Changes in Assets and Liabilities Information Agency Fund – Alternate Benefit Program Fund

June 30, 2020

	_	Balance June 30, 2019	Additions	Deductions	Balance June 30, 2020
Assets:					
Cash and cash equivalents	\$	2,554,236	197,876,311	198,146,664	2,283,883
Receivables:					
Other		42,699,854	45,537,187	42,699,854	45,537,187
Investments, at fair value:					
Cash Management Fund	_	144,429	219,300,824	219,019,506	425,747
Total assets	\$	45,398,519	462,714,322	459,866,024	48,246,817
Liabilities:					
Accounts payable and accrued expenses	\$	42,775,706	45,540,963	42,809,598	45,507,071
Due to State of New Jersey	-	2,622,813	116,933		2,739,746
Total liabilities	\$	45,398,519	45,657,896	42,809,598	48,246,817

Schedule of Changes in Assets and Liabilities Information Agency Fund – Pension Adjustment Fund

June 30, 2020

	Balance June 30, 2019		Additions	Deductions	Balance June 30, 2020
Assets:					
Cash and cash equivalents	\$	115,631	460,807	574,685	1,753
Receivables:					
State related employer contributions		102,629	756,726	714,608	144,747
Other		814	8,018	6,095	2,737
Investments, at fair value:					
Cash Management Fund	_	2,072,618	952,951	1,037,301	1,988,268
Total assets	\$	2,291,692	2,178,502	2,332,689	2,137,505
Liabilities:					
Assets held for local contributing employers	\$	1,990,368	_	83,384	1,906,984
Pension adjustment payroll payable		83,960	927,067	941,369	69,658
Due to State of New Jersey		92,689	47,091	92,689	47,091
Due to other funds	_	124,675	552,607	563,510	113,772
Total liabilities	\$	2,291,692	1,526,765	1,680,952	2,137,505

Schedule of Changes in Assets and Liabilities Information Agency Fund – Dental Expense Program Fund – Total

June 30, 2020

	•	Balance June 30, 2019	Additions	Deductions	Balance June 30, 2020
Assets:					
Cash and cash equivalents	\$	126,054	37,431,794	36,070,262	1,487,586
Receivables:					
Other		2,111,563	159,689,476	158,447,543	3,353,496
Investments, at fair value:					
Cash Management Fund		50,573,699	208,159,382	186,324,867	72,408,214
Total assets	\$	52,811,316	405,280,652	380,842,672	77,249,296
Liabilities:					
Accounts payable and accrued expenses	\$	52,811,316	68,515,331	44,077,351	77,249,296
Total liabilities	\$	52,811,316	68,515,331	44,077,351	77,249,296

Schedule of Changes in Assets and Liabilities Information Agency Fund – Dental Expense Program Fund – State

June 30, 2020

	_	Balance June 30, 2019	Additions	Deductions	Balance June 30, 2020
Assets:					
Cash and cash equivalents	\$	105,880	31,030,857	29,822,017	1,314,720
Receivables:					
Other		1,902,985	99,370,157	98,010,952	3,262,190
Investments, at fair value:		00 007 044	445.050.444	101 000 501	50 000 040
Cash Management Fund	-	39,227,341	145,659,141	134,002,564	50,883,918
Total assets	\$	41,236,206	276,060,155	261,835,533	55,460,828
Liabilities:					
Accounts payable and accrued expenses	\$	41,236,206	46,908,006	32,683,384	55,460,828
Total liabilities	\$	41,236,206	46,908,006	32,683,384	55,460,828

Schedule of Changes in Assets and Liabilities Information Agency Fund – Dental Expense Program Fund – Local

June 30, 2020

	•	Balance June 30, 2019	Additions	Deductions	Balance June 30, 2020
Assets:					
Cash and cash equivalents	\$	20,174	6,400,937	6,248,245	172,866
Receivables:					
Other		208,578	60,319,319	60,436,591	91,306
Investments, at fair value:					
Cash Management Fund		11,346,358	62,500,241	52,322,303	21,524,296
Total assets	\$	11,575,110	129,220,497	119,007,139	21,788,468
Liabilities:					
Accounts payable and accrued expenses	\$	11,575,110	21,607,325	11,393,967	21,788,468
Total liabilities	\$	11,575,110	21,607,325	11,393,967	21,788,468