



**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Financial Statements and Supplementary Schedules

June 30, 2017

(With Independent Auditors' Report Thereon)

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

Financial Statements and Supplementary Schedules

June 30, 2017

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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, 2017, 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, 2017, and the respective changes in financial position for the year then ended in accordance with U.S. generally accepted accounting principles.



Emphasis of Matter

Adoption of New Accounting Pronouncement

As discussed in note 2(k) to the financial statements, in 2017, the Division adopted Governmental Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefits Plans Other Than Pension Plans*. Our opinion is not modified with respect to this 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, 2017 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 GASB 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 29, 2018

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

Management's Discussion and Analysis

(Unaudited)

June 30, 2017

Our discussion and analysis of the financial performance of the fiduciary funds (the Funds) administered by the Division of Pensions and Benefits (the Division) provides an overview of the Funds' financial activities for the State fiscal year ended June 30, 2017. Please read it in conjunction with the basic financial statements and financial statement footnotes, which follow this discussion.

Financial Highlights

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

- Fiduciary net position increased by \$4.5 billion as a result of this year's operations from \$79.2 billion to \$83.7 billion.
- Additions for the year are \$15.9 billion, which are comprised of member, employer, nonemployer, and employer specific and other pension contributions of \$6.5 billion and net investment income of \$9.4 billion.
- Deductions for the year are \$11.5 billion, which are comprised of benefit and refund payments of \$11.4 billion and administrative expenses of \$45.5 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. Based on Governmental Accounting Standards Board (GASB) Statement No 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (GASB 74), the Division reevaluated the OPEB plans included in previously issued financial statements and determined that certain plans are not administered through a trust and do not meet the equivalent arrangement criteria as defined in GASB 74 and, therefore, should not be reported as fiduciary activities. The beginning of the year net position was restated, accordingly.

The statement of fiduciary net position for the pension trust funds and other postemployment benefit plan and the agency funds 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.

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DIVISION OF PENSIONS AND BENEFITS**

Management's Discussion and Analysis

(Unaudited)

June 30, 2017

The statement of changes in fiduciary net position for the pension trust funds and other postemployment benefit plan 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**

	<u>2017</u>	<u>2016*</u>	<u>Increase/ (Decrease)</u>
Assets:			
Cash and cash equivalents	\$ 883,450,234	8,506,182	874,944,052
Receivables	2,377,510,013	2,308,220,116	69,289,897
Investments	79,262,467,350	75,857,677,318	3,404,790,032
Securities lending collateral	958,403,742	1,298,508,410	(340,104,668)
Members' loans and mortgages	2,381,008,709	2,242,910,998	138,097,711
Total assets	<u>85,862,840,048</u>	<u>81,715,823,024</u>	<u>4,147,017,024</u>
Liabilities:			
Accounts payable and accrued expenses	252,706,110	230,377,370	22,328,740
Retirement benefits payable	883,776,543	866,831,486	16,945,057
Noncontributory group life insurance premiums payable	15,310,176	29,184,123	(13,873,947)
Administrative expense payable	13,229,786	15,674,896	(2,445,110)
Securities lending collateral and rebates payable	958,120,840	1,296,943,638	(338,822,798)
Total liabilities	<u>2,123,143,455</u>	<u>2,439,011,513</u>	<u>(315,868,058)</u>
Net position	<u>\$ 83,739,696,593</u>	<u>79,276,811,511</u>	<u>4,462,885,082</u>

* 2016 amounts were adjusted as a result of the adoption of GASB 74.

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Management's Discussion and Analysis

(Unaudited)

June 30, 2017

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 2016 and 2017, total assets increased by \$4.1 billion or 5.1%. This is primarily attributable to an increase of \$3.4 billion in investments due to strong returns from public equities, real estate, and private equity as explained more thoroughly below and a \$0.9 billion increase in cash and cash equivalents attributable to accrued payroll.

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 decreased by \$315.9 million or 13.0%. This decrease is mainly due to a decrease in securities lending collateral and rebates payable of \$338.8 million.

Net position restricted for pension and other postemployment benefits increased by \$4.5 billion or 5.6%.

Agency Funds

	2017	2016	Increase
Assets	\$ 92,091,661	80,470,543	11,621,118
Liabilities	92,091,661	80,470,543	11,621,118
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 2016 and 2017, total assets increased by \$11.6 million or 14.4%. This is attributable to the increased amount invested in the Cash Management Fund (CMF) of \$7.8 million and an increase of receivables of \$4.4 million, offset by a decrease of \$0.6 million in cash and cash equivalents.

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 2016 and 2017, total liabilities increased by \$11.6 million or 14.4%. This was comprised of a \$0.3 million decrease in payroll liabilities in PAF, an \$8.0 million increase in claim liabilities in DEP, and a \$3.9 million increase in employer reimbursements in ABP.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Management's Discussion and Analysis

(Unaudited)

June 30, 2017

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

	<u>2017</u>	<u>2016*</u>	<u>Increase/ (Decrease)</u>
Additions:			
Member contributions	\$ 2,322,645,150	2,239,969,343	82,675,807
Employer contributions	2,925,363,922	2,575,429,410	349,934,512
Nonemployer contributions	1,265,145,499	909,705,663	355,439,836
Employer specific and other contributions	33,826,150	15,215,219	18,610,931
Net investment income (loss)	<u>9,393,632,217</u>	<u>(651,172,295)</u>	<u>10,044,804,512</u>
Total additions	<u>15,940,612,938</u>	<u>5,089,147,340</u>	<u>10,851,465,598</u>
Deductions:			
Benefits	11,212,724,712	10,801,549,900	411,174,812
Refunds of contributions	219,513,451	202,432,865	17,080,586
Administrative expenses	<u>45,489,693</u>	<u>52,568,646</u>	<u>(7,078,953)</u>
Total deductions	<u>11,477,727,856</u>	<u>11,056,551,411</u>	<u>421,176,445</u>
Change in net position	<u>\$ 4,462,885,082</u>	<u>(5,967,404,071)</u>	<u>10,430,289,153</u>

* 2016 amounts were adjusted as a result of the adoption of GASB 74.

Additions of the pension trust funds and OPEB plan consist of member, employer, nonemployer, employer specific and other contributions, and earnings from investment activities. There was an increase of \$10.9 billion or 213.2% in total additions attributable to an increase in net investment income of \$10.1 billion and a net increase of \$0.8 billion in member, employer, nonemployer, and employer specific and other contributions in State fiscal year 2017 as compared to State fiscal year 2016.

Member contributions increased by \$82.7 million mainly due to the annual rate increases for the Teachers' Pension and Annuity Fund (TPAF), Public Employees' Retirement System (PERS) and the Judicial Retirement System (JRS) as required in Chapter 78, P.L. 2011.

The State contributed \$1,861.6 million to the pension trust funds in State fiscal year 2017. It was composed of \$276.1 million of normal cost and \$1,585.5 million of accrued liability. The contributions were as follows: \$1,087.9 million to TPAF, \$507.2 million to PERS, \$195.2 million to the Police & Firemen's Retirement System (PFRS), \$19.7 million to JRS, \$51.0 million to the State Police Retirement System (SPRS), and \$575 thousand to the Consolidated Police and Firemen's Pension Fund (CPFPF).

State NCGI contributions for the State fiscal year totaling \$82.3 million were as follows: \$39.1 million for TPAF, \$32.4 million for PERS, \$8.2 million for PFRS, \$0.7 million for JRS, and \$1.9 million for SPRS. Between State fiscal years 2016 and 2017, the State's contribution toward noncontributory group life insurance increased by \$7.0 million due to higher claims activity. State noncontributory life insurance benefits are funded on a pay-as-you-go basis. The local contributions for PERS and PFRS are included in the annual billings to local employers.

The annual local employer pension appropriation billings increased per the actuarial valuation as of July 1, 2015. For PERS, the amount accrued in State fiscal year 2016 for normal contribution, accrued liability, and NCGI was

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\$888.3 million and was due on April 1, 2017. For State fiscal year 2017, the total amount accrued was \$926.4 million and is due April 1, 2018. For PFRS, the total amount accrued in State fiscal year 2016 for normal contributions, accrued liability, and NCGI was \$815.2 million and was due April 1, 2017. For State fiscal year 2017, the total amount accrued was \$885.1 million and is due April 1, 2018.

For the OPEB plan, employer contributions increased by \$37.4 million primarily attributable to rate increases effective January 1, 2017.

The pension trust funds and the OPEB plan earned net investment income of \$9.4 billion in fiscal year 2017 as compared to a net investment loss of \$651.2 million for fiscal year 2016.

During fiscal year 2017, a strengthening global economic environment and a pronounced rebound in corporate earnings led equity markets to strong returns and higher valuations. The U.S. equity market was also buoyed, in part, by expectations for lower corporate tax rates, deregulation, and increased infrastructure spending. Emerging market equities outperformed, benefitting from renewed optimism and resilience to weak commodity prices and heightened geopolitical events.

In contrast, the high quality fixed income market lagged, with U.S. Treasuries realizing negative returns as interest rates moved higher in conjunction with tighter monetary policy. Investment grade credit fared modestly better than Treasuries as spreads narrowed. Lower quality fixed income significantly outperformed, rebounding from a challenging prior year, as high yield bonds realized robust equity-like returns resulting from pronounced spread compression.

Notwithstanding low cap rates and pressure from rising global bond yields, real estate earned attractive returns, proving resilient versus higher interest rates. Continued favorable demand for high quality real estate and relatively low levels of construction kept supply in check as demand for income producing assets persisted in a moderate growth economy and a low interest rate environment. Private equity exhibited strong performance, buoyed by robust public equity returns.

In reference to Schedule of Investment Returns – Annual Money-Weighted Rate of Return, Net of Investment Expense (see Required Supplementary Information Schedule 3), the fiscal year 2017 rate was 13.01% compared to -1.15% in the prior year. It was based on GASB Statement No. 67, *Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25* (GASB 67).

Deductions of the pension trust funds and OPEB plan are mainly comprised of pension benefit payments to retirees and beneficiaries, refunds of contributions to former members, 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. Between State fiscal years 2016 and 2017, benefit payments increased by \$411.2 million or 3.8% due to an increase in the number of retirees receiving retirement and other benefits.

The change in net position was mainly attributable to the increase in net investment income when comparing State fiscal year 2017 to State fiscal year 2016.

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Investment Performance

The rates of return (i.e. investment performance, which includes income and changes in the fair value of investments) for JRS, Prison Officers' Pension Fund, SPRS, CPFPPF, TPAF, PFRS, and PERS, collectively, the Pension Funds, and various market indices are as follows:

	Year ended June 30	
	2017	2016
Risk Mitigation	2.33	(1.20)
<i>T-Bill + 300 BP</i>	3.54	3.24
Total Short Term and Cash ¹	1.08	1.05
<i>91 Day Treasury Bill (Daily)</i>	0.49	0.19
Governments	(2.69)	4.42
<i>Custom Government Benchmark</i>	(1.97)	5.42
Total Liquidity	(0.95)	2.69
<i>Liquidity Benchmark</i>	(0.37)	2.14
Investment Grade Credit	0.67	6.57
<i>Custom Investment Grade Credit Benchmark</i>	1.01	7.55
Public High Yield	12.24	2.08
<i>BBG BARC Corp HY (Daily)</i>	12.70	1.62
Global Diversified Credit	25.86	3.32
<i>BBG BARC Corp HY (Daily)</i>	12.70	1.62
Credit-Oriented Hedge Funds	10.13	(1.04)
<i>50 HFRI DR 50 HFRI CA (1 month lag)</i>	13.22	(5.83)
Debt Related Private Equity	9.95	2.00
<i>BarCap Corp HY (1 Qtr lag) + 300 bps</i>	19.92	(0.76)
Debt Related Real Estate	4.15	1.04
<i>Barclays CMBS 2.0 Baa + 100 (Quarter lag)</i>	6.14	(2.01)
Total Income	7.28	3.67
<i>Income Benchmark</i>	7.80	2.27
Real Return Private Real Assets and Commodities	6.86	(4.19)
<i>CA Energy Upst & Royalties & PE Lagged D</i>	22.73	(19.71)
Equity Related Real Estate	8.80	11.97
<i>Real Estate Index</i>	7.36	12.62
Total Real Return	8.23	6.30
<i>Real Return Benchmark</i>	11.12	1.89
US Equity	19.80	(1.58)
<i>S&P 1500 Super Composite (Daily)</i>	18.09	3.64
Non-US Equity Developed Markets Equity	19.02	(9.59)
<i>Custom International Developed Markets Benchmark²</i>	19.59	(9.96)
Emerging Markets Equity	22.69	(10.81)
<i>Custom International Emerging Markets Benchmark²</i>	24.07	(11.77)

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DIVISION OF PENSIONS AND BENEFITS**

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(Unaudited)

June 30, 2017

	Year ended June 30	
	2017	2016
Equity Oriented Hedge Funds	18.48	(13.06)
<i>50 HFRI EH 50 HFRI ED ACTIVIST (1 month lag)</i>	12.40	(5.24)
Buyouts-Venture Capital	12.99	6.73
<i>Custom Cambridge Blend</i>	14.10	2.90
Total Global Growth	18.80	(3.62)
<i>Global Growth Benchmark</i>	18.51	(1.62)
Opportunistic Investments	15.18	(0.92)
Total Pension Funds	13.07	(0.93)
<i>NJDOI Policy Index</i>	13.14	0.21

1 The cash aggregate comprises the two common pension fund cash accounts, in addition to the seven plan cash accounts.

2 Source: MSCI. The MSCI data is comprised of a custom index calculated by MSCI for, and as requested by the Division of Investment. These benchmarks exclude those securities deemed ineligible for investment under the State statutes governing investments in Iran, Sudan and companies that boycott Israel.

Overall Financial Condition of the Funds

Based on the GASB 67 and actuaries' GASB 67 disclosures for State fiscal year 2017, 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 35.79% and the net pension liability as a percentage of covered payroll was 551.39%. For the prior year, the combined state and local ratios of plan fiduciary net position as a percentage of the total pension liability was 30.93% and the net pension liability as a percentage of covered payroll was 655.6%.

For the OPEB plan, total revenues incurred exceeded total expenses recognized by \$62.9 million, increasing the surplus at the beginning of the year from \$150.4 million to \$213.3 million at year-end.

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The OPEB plan is subject to the new reporting and disclosure requirements under GASB 74, beginning with the fiscal year ending June 30, 2017. GASB 74 replaces the GASB Statement No. 43, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* and requires that the plan disclose a net OPEB liability that will be recognized on the balance sheet of the employers participating in the plan. The new standard requires the entry age normal actuarial cost method be utilized to determine the total OPEB liability. It also requires that future OPEB benefit payments be discounted using a discount rate that reflects a 20-year tax-exempt municipal bond yield or index rate if assets are not available to cover such benefit payments. Based on the June 30, 2017 GASB 74 actuarial report, the net OPEB liability has been measured to be \$14.3 billion.

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.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Statement of Fiduciary Net Position
Fiduciary Funds

June 30, 2017

	Pension Trust Funds and Other Postemployment Benefit Plan	Agency Funds
	<hr/>	<hr/>
Assets:		
Cash and cash equivalents	\$ 883,450,234	2,204,271
Receivables:		
Contributions:		
Members	190,121,835	—
Employers	2,110,837,862	258,955
Accrued interest and dividends	5,146,689	—
Other	71,403,627	40,359,377
Total receivables	<hr/> 2,377,510,013	<hr/> 40,618,332
Investments, at fair value:		
Cash Management Fund	419,133,596	49,269,058
Common Pension Fund D	50,656,688,406	—
Common Pension Fund E	23,977,861,553	—
Domestic equities	759,462,694	—
Fixed income mutual funds	430,136,637	—
Equity mutual funds	3,019,184,464	—
Total investments	<hr/> 79,262,467,350	<hr/> 49,269,058
Securities lending collateral	958,403,742	—
Members' loans and mortgages	2,381,008,709	—
Total assets	<hr/> 85,862,840,048	<hr/> 92,091,661
Liabilities:		
Accounts payable and accrued expenses	252,706,110	89,709,090
Retirement benefits payable	883,776,543	—
Noncontributory group life insurance premiums payable	15,310,176	—
Administrative expense payable	13,229,786	—
Assets held for local contributing employers	—	2,023,233
Pension adjustment payroll payable	—	72,370
Due to State of New Jersey	—	126,440
Due to other funds	—	160,528
Securities lending collateral and rebates payable	958,120,840	—
Total liabilities	<hr/> 2,123,143,455	<hr/> 92,091,661
Net position:		
Restricted for pension and other postemployment benefits	\$ <hr/> 83,739,696,593	<hr/> —

See accompanying notes to financial statements.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

June 30, 2017

	Defined Benefit Pension Plans							Defined Contribution Pension Plans		Other Postemployment Benefit Plan	Total	
	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 Benefit Program Fund Local - Retired
Assets:												
Cash and cash equivalents	\$ 5,000,117	284,097	18,969,604	177,544	353,178,098	196,682,671	307,314,387	36,858	14,231	1,566,373	226,254	883,450,234
Receivables:												
Contributions:												
Members	676,066	—	1,094,446	—	76,505,113	51,842,902	59,619,441	—	—	383,867	—	190,121,835
Employers	—	—	80,304	—	26,569,423	1,032,873,483	1,042,303,973	—	—	—	9,010,679	2,110,837,862
Accrued interest and dividends	486	17	2,024	26	41,228	4,201,002	35,826	5	641,034	225,041	—	5,146,689
Other	1,307,451	2,507	1,259,094	237,752	12,647,936	7,178,418	22,164,889	—	5,823,311	—	20,782,269	71,403,627
Total receivables	1,984,003	2,524	2,435,868	237,778	115,763,700	1,096,095,805	1,124,124,129	5	6,464,345	608,908	29,792,948	2,377,510,013
Investments, at fair value:												
Cash Management Fund	3,912,496	5,417,728	13,376,644	1,638,567	61,465,645	46,031,975	38,789,354	2,298	13,116,786	1,314,281	234,067,822	419,133,596
Common Pension Fund D	121,379,434	—	1,175,226,557	—	15,621,176,710	15,613,185,805	18,125,719,900	—	—	—	—	50,656,688,406
Common Pension Fund E	47,103,013	—	553,910,211	—	7,066,359,178	7,640,826,759	8,669,662,392	—	—	—	—	23,977,861,553
Domestic equities	—	—	—	—	—	—	—	—	536,388,570	223,074,124	—	759,462,694
Fixed income mutual funds	—	—	—	—	—	—	—	—	430,136,637	—	—	430,136,637
Equity mutual funds	—	—	—	—	—	—	—	—	3,019,184,464	—	—	3,019,184,464
Total investments	172,394,943	5,417,728	1,742,513,412	1,638,567	22,749,001,533	23,300,044,539	26,834,171,646	2,298	3,998,826,457	224,388,405	234,067,822	79,262,467,350
Securities lending collateral	2,296,449	—	22,234,804	—	295,546,248	295,395,064	342,931,177	—	—	—	—	958,403,742
Members' loans and mortgages	511,721	—	15,479,955	—	283,207,356	1,462,285,744	619,523,933	—	—	—	—	2,381,008,709
Total assets	182,187,233	5,704,349	1,801,633,643	2,053,889	23,796,696,935	26,350,503,823	29,228,065,272	39,161	4,005,305,033	226,563,686	264,087,024	85,862,840,048
Liabilities:												
Accounts payable and accrued expenses	—	1,011	—	—	81,688,581	5,988,986	96,699,759	13,107	17,424,654	195,584	50,694,428	252,706,110
Retirement benefits payable	4,515,169	81,006	17,722,568	147,911	355,065,159	196,739,631	309,203,462	26,054	—	275,583	—	883,776,543
Noncontributory group life insurance premiums payable	—	—	80,304	—	4,029,942	3,288,170	7,911,760	—	—	—	—	15,310,176
Administrative expense payable	50,960	1,464	105,195	1,482	4,292,415	1,460,768	7,180,823	—	—	—	136,679	13,229,786
Securities lending collateral and rebates payable	2,295,771	—	22,228,241	—	295,459,009	295,307,869	342,829,950	—	—	—	—	958,120,840
Total liabilities	6,861,900	83,481	40,136,308	149,393	740,535,106	502,785,424	763,825,754	39,161	17,424,654	471,167	50,831,107	2,123,143,455
Net position:												
Restricted for pension and other postemployment benefits	\$ 175,325,333	5,620,868	1,761,497,335	1,904,496	23,056,161,829	25,847,718,399	28,464,239,518	—	3,987,880,379	226,092,519	213,255,917	83,739,696,593

See accompanying notes to financial statements.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Statement of Changes in Fiduciary Net Position
Fiduciary Funds

Year ended June 30, 2017

	Pension Trust Funds and Other Postemployment Benefit Plan
Additions:	
Contributions:	
Members	\$ 2,322,645,150
Employers	2,925,363,922
Nonemployer	1,265,145,499
Employer specific and other	<u>33,826,150</u>
Total contributions	<u>6,546,980,721</u>
Investment income:	
Net increase in fair value of investments	7,879,005,318
Interest	1,517,504,211
Dividends	<u>15,758,948</u>
	9,412,268,477
Less investment expense	<u>18,636,260</u>
Net investment income	<u>9,393,632,217</u>
Total additions	<u>15,940,612,938</u>
Deductions:	
Benefits	11,212,724,712
Refunds of contributions	219,513,451
Administrative and miscellaneous expenses	<u>45,489,693</u>
Total deductions	<u>11,477,727,856</u>
Change in net position	4,462,885,082
Net position restricted for pension and other postemployment benefits:	
Beginning of year, as restated (note 2(k))	<u>79,276,811,511</u>
End of year	<u>\$ <u>83,739,696,593</u></u>

See accompanying notes to financial statements.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

Year ended June 30, 2017

	Defined Benefit Pension Plans							Defined Contribution Pension Plan	Other Postemployment Benefit Plan	Total		
	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 Benefit Program Fund Local - Retired
Additions:												
Contributions:												
Members	\$ 10,348,191	—	23,721,785	—	790,788,033	395,878,384	847,952,137	—	194,488,684	5,882,431	53,585,505	2,322,645,150
Employers	20,341,379	—	53,006,614	575,000	1,404,292	1,002,043,734	1,465,931,579	248,000	—	—	381,813,324	2,925,363,922
Nonemployer	—	—	—	—	1,125,614,188	86,467,000	—	—	—	—	53,064,311	1,265,145,499
Employer specific and other	1,121,097	552,131	3,925	964,280	1,696,090	13,107,651	16,358,762	—	—	—	—	33,826,150
Total contributions	31,810,667	552,131	76,732,324	1,539,280	1,919,502,603	1,497,496,769	2,330,242,478	270,214	194,488,684	5,882,431	488,463,140	6,546,980,721
Investment income:												
Net increase/(decrease) in fair value of investments	16,847,510	(1,719)	175,221,726	(486)	2,300,089,571	2,304,714,942	2,662,886,052	—	389,170,474	30,076,908	340	7,879,005,318
Interest	3,208,312	34,648	32,328,268	12,685	442,954,741	488,450,683	549,638,114	612	77,593	7,846	790,709	1,517,504,211
Dividends	—	—	—	—	—	—	—	—	10,417,725	5,341,223	—	15,758,948
	20,055,822	32,929	207,549,994	12,199	2,743,044,312	2,793,165,625	3,212,524,166	612	399,665,792	35,425,977	791,049	9,412,268,477
Less investment expense	24,670	2,082	148,404	2,100	6,055,521	2,060,765	10,130,329	—	212,389	—	—	18,636,260
Net investment income	20,031,152	30,847	207,401,590	10,099	2,736,988,791	2,791,104,860	3,202,393,837	612	399,453,403	35,425,977	791,049	9,393,632,217
Total additions	51,841,819	582,978	284,133,914	1,549,379	4,656,491,394	4,288,601,629	5,532,636,315	270,826	593,942,087	41,308,408	489,254,189	15,940,612,938
Deductions:												
Benefits	56,306,453	1,069,209	217,212,067	1,535,623	4,238,076,768	2,413,928,737	3,667,217,598	258,290	183,110,996	16,520,123	417,488,848	11,212,724,712
Refunds of contributions	59,265	—	91,879	—	68,191,977	7,556,700	143,601,094	12,536	—	—	—	219,513,451
Administrative and miscellaneous expenses	150,588	4,134	294,745	4,188	11,923,787	4,124,457	19,648,715	—	444,503	—	8,894,576	45,489,693
Total deductions	56,516,306	1,073,343	217,598,691	1,539,811	4,318,192,532	2,425,609,894	3,830,467,407	270,826	183,555,499	16,520,123	426,383,424	11,477,727,856
Change in net position	(4,674,487)	(490,365)	66,535,223	9,568	338,298,862	1,862,991,735	1,702,168,908	—	410,386,588	24,788,285	62,870,765	4,462,885,082
Net position restricted for pension and other postemployment benefits:												
Beginning of year, as restated (note 2(k))	179,999,820	6,111,233	1,694,962,112	1,894,928	22,717,862,967	23,984,726,664	26,762,070,610	—	3,577,493,791	201,304,234	150,385,152	79,276,811,511
End of year	\$ 175,325,333	5,620,868	1,761,497,335	1,904,496	23,056,161,829	25,847,718,399	28,464,239,518	—	3,987,880,379	226,092,519	213,255,917	83,739,696,593

See accompanying notes to financial statements.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Notes to Financial Statements

June 30, 2017

(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 other postemployment benefits (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
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 Benefit Program Fund - Local	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)

(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:

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Notes to Financial Statements

June 30, 2017

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 allowances under the following 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.

The authority to amend the provisions of the above plans rests with new legislation passed by the State of New Jersey. Pension reforms enacted pursuant to Chapter 78, P.L. 2011 included provisions creating special Pension Plan Design Committees for JRS, SPRS, TPAF, PFRS, and PERS, once a Target Funded Ratio (TFR) is met. The Pension Plan Design Committees will have the discretionary authority to modify certain plan design features, including member contribution rate; formula for calculation of final

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Notes to Financial Statements

June 30, 2017

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.

Plan Membership and Contributing Employers

Membership and contributing employers of the defined benefit pension plans consisted of the following at June 30, 2017:

	<u>JRS</u>	<u>POPF</u>	<u>SPRS</u>	<u>CPFPF</u>	<u>TPAF*</u>	<u>PFRS</u>	<u>PERS</u>	<u>CPF</u>
Inactive plan members or beneficiaries currently receiving benefits	605	90	3,566	95	101,246	43,011	170,124	13
Inactive plan members entitled to but not yet receiving benefits	4	—	—	—	222	47	650	—
Active plan members	<u>410</u>	<u>—</u>	<u>2,725</u>	<u>—</u>	<u>140,563</u>	<u>40,789</u>	<u>254,685</u>	<u>—</u>
Total	<u>1,019</u>	<u>90</u>	<u>6,291</u>	<u>95</u>	<u>242,031</u>	<u>83,847</u>	<u>425,459</u>	<u>13</u>
Contributing employers	1	1	1	41	24	586	1,705	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.

Pension Plans' Boards and Composition

The table below represents the composition and source of selection for the Plan's boards:

	<u>SPRS</u>	<u>TPAF</u>	<u>PFRS</u>	<u>PERS</u>
Appointments by:				
Governor	2	2	5	2
Treasurer	1	1	1	1
Superintendent of the State Police	2	—	—	—
Elected by Board or Members	<u>—</u>	<u>4</u>	<u>5</u>	<u>6</u>
Total	<u>5</u>	<u>7</u>	<u>11</u>	<u>9</u>

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

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

Notes to Financial Statements

June 30, 2017

Contribution Requirements and Benefit Provisions

Significant Legislation

Chapter 19, P.L. 2009, 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 Chapter 78, P.L. 2011, COLA increases were suspended for all current and future retirees of all retirement systems.

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 Chapter 78, P.L. 2011, the active member contribution rate is being increased from 3% to 12%, phased-in over seven years for members hired or reappointed after June 28, 2011. In October 2011, the member contribution rate for new members increased. The phase-in of the additional incremental member contribution rate takes place in July of each subsequent State fiscal year. The member contribution rate was 10.7% in State fiscal year 2017. 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 were 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.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

Notes to Financial Statements

June 30, 2017

POPF

There are no active members in POPF. Additionally, based on the recent actuarial valuation, there was no normal cost or accrued liability contribution required by the State for the fiscal year ended June 30, 2017. 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 Chapter 78, P.L. 2011, the active member contribution rate was 9% in State fiscal year 2017. The State's contribution is based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

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

CPFPF

There are no active members in CPFPF. Additionally, based on the recent actuarial valuation, the State made a \$575,000 contribution towards the unfunded accrued liability during the fiscal year ended June 30, 2017. 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 Chapter 78, P.L. 2011, the active member contribution rate increased from 5.5% of annual compensation to 6.5% plus an additional 1% phased-in over 7 years beginning in July 2012. The member contribution rate was 7.20% in State fiscal year 2017. The phase-in of the additional incremental member contribution rate takes place in July of each subsequent State fiscal year. 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, except for medical benefits, which vest after 25 years of service or under the disability provisions of TPAF. 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.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Notes to Financial Statements

June 30, 2017

The following represents the membership tiers for TPAF:

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

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

PFRS

The contribution policy is set by N.J.S.A. 43:16A and requires contributions by active members and contributing employers. Pursuant to the provisions of Chapter 78, P.L. 2011, the active member contribution rate was 10% in State fiscal year 2017. 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.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Notes to Financial Statements

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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 Chapter 78, P.L. 2011, the active member contribution rate increased from 5.5% of annual compensation to 6.5% plus an additional 1% phased-in over 7 years beginning in July 2012. The member contribution rate was 7.20% in State fiscal year 2017. The phase-in of the additional incremental member contribution rate takes place in July of each subsequent State fiscal year. The rate for members who are eligible for the Prosecutors Part of PERS (Chapter 366, P.L. 2001) was 10% in State fiscal year 2017. 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, except for medical benefits, which vest after 25 years of service or under the disability provisions of PERS.

The following represents the membership tiers for PERS:

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

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

CPF

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

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.

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(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, 2017, membership in the defined contribution pension plans consisted of the following based on the information within the Division's database:

Plan	Members
NJSEDCP	53,019
SACT	3,025

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 \$18,000 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 GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*. Plan members are fully vested for the current valuation of their account from the date of enrollment in the plan. Benefits are payable upon separation from service with the State of New Jersey.

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SACT

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

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

(d) Other Postemployment Benefit Plan

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

Plan Membership and Contributing Employers

Membership and contributing employers of the defined benefit OPEB plan consisted of the following at June 30, 2017:

Inactive plan members or beneficiaries currently receiving benefits	37,967
Inactive plan members entitled to but not yet receiving benefits	—
Active plan members	<u>36,712</u>
Total	<u><u>74,679</u></u>
Contributing employers	579

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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 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 Chapter 330, P.L. 1967, 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 \$381.8 million and the State of New Jersey, as the non-employer contributing entity, contributed \$53.1 million for fiscal year 2017.

Pursuant to Chapter 78, P.L. 2011, 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.

Partially funded benefits are also available to 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 Chapter 330, P.L. 1997. Upon retirement, these individuals must enroll in the OPEB plan.

(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 the cost of living adjustment (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 the Governmental Accounting Standards Board (GASB).

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The accrual basis of accounting is used for measuring financial position and changes in net position of the pension trust funds and other postemployment benefit plan. 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.

(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 Division of Pensions and Benefits report are: Common Pension Fund D and Common Pension Fund E (collectively known as the Common Pension Funds), and other investments owned directly by the seven defined benefit pension plans. 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

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financial statements, which can be obtained at <http://www.state.nj.us/treasury/doinvest/cm/FinancialStatementsFiscal2017.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 or decrease 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 Treasurer. For 2017, the interest rate was 6.25%. 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.

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(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, 2017, Common Pension Fund E had unfunded commitments totaling approximately \$10.1 billion.

(j) Use of Estimates

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

(k) Adoption of Accounting Pronouncements

The Division adopted GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans* (GASB Statement No. 74). GASB Statement No. 74 established new accounting and financial reporting requirements for governments whose employees are provided with OPEB as well as certain nonemployer governments that have a legal obligation to provide financial support for OPEB provided to the employees of other entities. GASB Statement No. 74 includes OPEB plans that are administered through a trust or equivalent arrangement that meets certain criteria: a) contributions from employers and nonemployer contributing entities to the plan and earnings on those contributions are irrevocable; b) plan assets are dedicated to providing OPEB to plan members in accordance with the benefit terms; and c) plan assets are legally protected from creditors. While the adoption of GASB Statement No. 74 determined the requirements for financial accounting, reporting and disclosures, it does not impact the funding of the plans, which is determined by State statute.

In connection with the implementation of GASB Statement No. 74, the Division reevaluated the plans included in the statement of fiduciary activities and determined that certain plans are not administered through qualified trusts and do not meet equivalent arrangement criteria as defined above, therefore should not be reported in the fiduciary activities of the Division. As such, the adoption of GASB 74 resulted in the following adjustment:

Net position restricted for pension and other postemployment benefits:	
Beginning of year, as previously reported	\$ 79,228,529,236
Adjustment as result of the adoption of GASB Statement No. 74	<u>48,282,275</u>
Net position restricted for pension and other postemployment benefits:	
Beginning of year, as restated	<u>\$ 79,276,811,511</u>

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(3) Employers' Net Pension Liability – Defined Benefit Plans

Components of Net Pension Liability

The components of the net pension liability of the participating employers for the defined benefit plans at June 30, 2017 are as follows:

	<u>JRS</u>	<u>POPF</u>	<u>SPRS</u>	<u>CPFPF</u>	<u>TPAF</u>	<u>PFRS</u>	<u>PERS</u>
Total pension liability	\$ 937,395,995	6,477,263	5,124,274,114	7,396,613	90,726,371,000	47,410,721,738	77,388,263,903
Plan fiduciary net position	175,325,333	5,620,868	1,761,497,335	1,904,496	23,056,161,829	25,847,718,399	28,464,239,518
Net pension liability	<u>\$ 762,070,662</u>	<u>856,395</u>	<u>3,362,776,779</u>	<u>5,492,117</u>	<u>67,670,209,171</u>	<u>21,563,003,339</u>	<u>48,924,024,385</u>
Plan fiduciary net position as a percentage of the total pension liability	18.70%	86.78%	34.38%	25.75%	25.41%	54.52%	36.78%

The total pension liability was determined by actuarial valuations as of July 1, 2016, which was rolled forward to June 30, 2017, using the following actuarial assumptions, applied to all periods in the measurement:

	<u>JRS</u>	<u>POPF</u>	<u>SPRS</u>	<u>CPFPF</u>	<u>TPAF</u>	<u>PFRS</u>	<u>PERS</u>
Inflation rate	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
Salary increases:							
Initial fiscal year applied							
through	2025	N/A	2025	N/A	*	2026	2026
Rate	2.00%	N/A	2.95%	N/A	*	2.10 - 8.98%	1.65 to 4.15%
Thereafter	3.00%	N/A	3.95%	N/A	*	based on age 3.10 - 9.98%	based on age 2.65 - 5.15%
Long-term expected rate of return	7.00%	1.00%	7.00%	1.00%	7.00%	7.00%	7.00%
Period of actuarial experience study upon which actuarial assumptions were based	July 1, 2011 - June 30, 2014	N/A	July 1, 2011 - June 30, 2014	N/A	July 1, 2012 - June 30, 2015	July 1, 2010 - June 30, 2013	July 1, 2011 - June 30, 2014

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

* - Salary increases are various based on experience and the valuation year.

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The following table represents the mortality table and improvement assumptions used:

<u>Plan</u>	<u>Pre-retirement mortality</u>	<u>Post-retirement mortality</u>	<u>Disability</u>
JRS	RP-2000 Combined Healthy Male and RP-2000 Combined Healthy Female Mortality Tables (unadjusted for males and set forward 3 years for females) projected on a generational basis from the base year of 2000 to 2013 using Projection Scale BB for the base tables. The base tables are projected beyond the base year using the plan actuary's modified MP-2014 projection scale.	RP-2000 Combined Healthy Mortality Tables (unadjusted for males and set forward 3 years for females) for service retirement and beneficiaries of former members projected on a generational basis from the base year of 2000 to 2013 using Projection Scale BB for the base tables. The base tables are projected beyond the base year using the plan actuary's modified MP-2014 projection scale.	RP-2000 Disability Mortality Tables (set forward 2 years for males and females) are used to value disabled retirees.
POPF	Not applicable as there are no active members.	RP-2000 Combined Healthy Mortality Tables projected on a generational basis from the base year of 2000 to 2014 using Projection Scale BB as the base tables and the tables are further projected beyond the valuation date using the plan actuary's modified 2014 projection scale.	RP-2000 disabled retiree mortality table is used for the period after disability retirement.
SPRS	RP-2000 Combined Healthy Male (set back 3 years) and RP-2000 Combined Healthy Female Mortality Tables projected on a generational basis from the base year of 2000 to 2013 using Projection Scale BB as the base table. The base tables are further projected using the plan actuary's modified MP-2014 projection scale.	RP-2000 Combined Healthy Male (set back 3 years) and RP-2000 Combined Healthy Female Mortality tables projected on a generational basis from the base year of 2000 to 2013 using Projection Scale BB. The base tables are further projected beyond the valuation date using the plan actuary's modified MP-2014 projection scale.	RP-2000 Combined Healthy Male (set forward 5 years) and RP-2000 Combined Healthy Female Mortality (set forward 5 years) tables.
CPFPF	Not applicable as there are no active members.	RP-2000 Combined Healthy Mortality Tables projected on a generational basis from the base year of 2000 to 2014 using Projection Scale BB as the base tables.	Special mortality tables are used for the period after disability retirement with no provisions made for mortality improvement after the valuation date.

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Plan	Pre-retirement mortality	Post-retirement mortality	Disability
TPAF	Based on experience of TPAF members reflecting mortality improvement on a generational basis based on a 60-year average of Social Security data from 1953 to 2013.	Based on experience of TPAF members reflecting mortality improvement on a generational basis based on a 60-year average of Social Security data from 1953 to 2013.	Based on experience of TPAF members reflecting mortality improvement on a generational basis based on a 60-year average of Social Security data from 1953 to 2013.
PFRS	RP2000 Employee Preretirement mortality tables projected thirteen-years using Projection Scale BB and then projected on a generational basis using the plan actuary's modified 2014 projection scales.	RP-2000 Combined Healthy Mortality Tables projected one year using Projection Scale AA and three years using the plan actuary's modified 2014 Projection Scales is the base table for male service retirements and are further projected on a generational basis using the plan actuary's modified 2014 Projection Scales. RP-2000 Combined Healthy Mortality Tables projected thirteen-years using Projection Scale BB and then three years projected using the plan actuary's modified 2014 Projection Scales is the base table for female service retirements and beneficiaries and are further projected on a generational basis using the plan actuary's modified 2014 projection scales.	Special mortality tables are used for the period after disability retirement.
PERS	RP-2000 Employee Preretirement Mortality Table for male and female active participants. For State, mortality tables are set back 4 years for males and 4 years for females. For employees of Local employers, mortality tables are set back 2 years for males and 7 years for females. In addition, the tables provide for future improvements in mortality from the base year of 2013 using a generational approach based on the plan actuary's modified MP-2014 projection scale.	RP-2000 Combined Healthy Male and Female Mortality Tables (set back 1 year for males and females) for service retirement and beneficiaries of former members and a one year static projection based on mortality improvement Scale AA. In addition, the tables for service retirement and beneficiaries of former members provide for future improvements in mortality from the base year of 2013 using a generational approach based on the plan actuary's modified MP-2014 projection scale.	RP-2000 Disabled Mortality Tables (set back 3 years for males and set forward 1 year for females).

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Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plans 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 plans' target asset allocation as of June 30, 2017 are summarized in the following table:

<u>Asset Class</u>	<u>JRS, SPRS, TPAF, PFRS PERS</u>	<u>POPF & CPFPPF</u>
Absolute return/risk mitigation	5.51%	—
Cash equivalents	1.00%	1.00%
U.S. Treasuries	1.87%	—
Investment grade credit	3.78%	—
Public high yield	6.82%	—
Global diversified credit	7.10%	—
Credit oriented hedge funds	6.60%	—
Debt related private equity	10.63%	—
Debt related real estate	6.61%	—
Private real asset	11.83%	—
Equity related real estate	9.23%	—
U.S. equity	8.19%	—
Non-U.S. developed markets equity	9.00%	—
Emerging markets equity	11.64%	—
Buyouts/venture capital	13.08%	—

Discount Rate

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

<u>Plan</u>	<u>Discount Rate</u>
JRS	3.83%
POPF	3.58%
SPRS	4.42%
CPFPPF	3.58%
TPAF	4.25%
PFRS	6.14%
PERS	5.00%

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

	<u>JRS</u>	<u>POPF</u>	<u>SPRS</u>	<u>CPFPPF</u>	<u>TPAF</u>	<u>PFRS</u>	<u>PERS</u>
Period of projected benefit payments for which the following rates were applied:							
Long-term expected rate of return	Through June 30, 2023	Not applicable	Through June 30, 2037	Not applicable	Through June 30, 2036	Through June 30, 2057	Through June 30, 2040
Municipal Bond rate*	From July 1, 2023 and thereafter	All periods	From July 1, 2037 and thereafter	All periods	From July 1, 2036 and thereafter	From July 1, 2057 and thereafter	From July 1, 2040 and thereafter

* The municipal bond return rate used is 3.58%. 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 of each plan calculated using the discount rates as disclosed above as well as what each plan's net pension liability 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:

<u>Pension Plan (rates used)</u>	<u>At 1% decrease</u>	<u>At current discount rate</u>	<u>At 1% increase</u>
JRS (2.83%, 3.83%, 4.83%)	\$ 861,952,973	762,070,662	677,006,861
POPF (2.58%, 3.58%, 4.58%)	1,190,286	856,395	555,217
SPRS (3.42%, 4.42%, 5.42%)	4,177,923,905	3,362,776,779	2,713,454,218
CPFPPF (2.58%, 3.58%, 4.58%)	5,819,905	5,492,117	5,194,839
TPAF (3.25%, 4.25%, 5.25%)	80,394,331,171	67,670,209,171	57,188,022,171
PFRS (5.14%, 6.14%, 7.14%)	27,821,627,837	21,563,003,339	16,422,367,495
PERS (4.00%, 5.00%, 6.00%)	58,697,018,759	48,924,024,385	40,792,456,582

(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, 2017 are as follows:

Total OPEB liability	\$ 14,558,177,389
Plan fiduciary net position	<u>213,255,917</u>
Net OPEB liability	<u>\$ 14,344,921,472</u>
Plan fiduciary net position as a percentage of the total OPEB liability	1.46%

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The total OPEB liability was determined by an actuarial valuation as of July 1, 2016, which was rolled forward to June 30, 2017 using the following actuarial assumptions, applied to all periods in the measurement:

Inflation rate	2.50%
Salary Increases*	
Initial fiscal year applied through	2026
Rate	1.65% to 8.98%
Rate thereafter	2.65% to 9.98%
Mortality	RP-2006 Headcount-Weighted Healthy Employee Male / Female Mortality Table with fully generational mortality improvement projections from the central year using Scale MP-2017
Long-term rate of return	1.00%

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

Actuarial assumptions used in the July 1, 2016 valuation were based on the results of the PFRS and PERS experience studies prepared for July 1, 2010 to June 30, 2013 and July 1, 2011 to June 30, 2014, respectively.

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For pre-Medicare preferred provider organization (PPO) medical benefits, this amount initially is 5.9% and decreases to a 5.0% long-term trend rate after nine years. For self-insured post-65 PPO medical benefits, the trend rate is 4.5%. For health maintenance organization (HMO) medical benefits, the trend rate is initially 5.9% and decreases to a 5.0% long-term trend rate after nine years. For prescription drug benefits, the initial trend rate is 10.5% and decreases to a 5.0% long-term trend rate after eight years. The Medicare Advantage trend rate is 4.5% and will continue in all future years.

As the OPEB plan only invests in the State of New Jersey Cash Management Fund, 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 1.00%.

The discount rate for the OPEB plan was 3.58%. 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:

	<u>At 1% decrease (2.58%)</u>	<u>At current discount rate (3.58%)</u>	<u>At 1% increase (4.58%)</u>
\$	16,744,999,016	14,344,921,472	12,423,831,964

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

	<u>1% Decrease</u>	<u>Healthcare Cost Trend Rate</u>	<u>1% Increase</u>
\$	12,114,100,439	14,344,921,472	17,205,229,327

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(5) Investments

The Plans' investments (including investments held directly by the Common Pension Funds) as of June 30, 2017 are as follows:

Common Pension Fund D:	
Cash	\$ 216,271,465
Cash Management Fund	2,879,077,106
Domestic equities	22,232,686,145
International equities	14,297,127,070
Domestic fixed income	7,794,075,582
International fixed income	3,106,982,254
Put options	1,222,000
Other ⁽¹⁾	129,246,784
	<u>50,656,688,406</u>
Common Pension Fund E:	
Cash	80,757,442
Cash Management Fund	685,991,889
Absolute return strategy funds	5,912,041,737
Private equity funds	7,841,284,133
Real estate funds	3,561,208,587
Global diversified credit funds	3,427,816,091
Real assets	1,829,032,290
Opportunistic private equity investments	341,986,613
Other ⁽¹⁾	297,742,771
	<u>23,977,861,553</u>
All Other Investments:	
Cash Management Fund	468,402,654
Domestic equities	759,462,694
Fixed income mutual funds	430,136,637
Equity mutual funds	3,019,184,464
	<u>4,677,186,449</u>
Total	<u>\$ 79,311,736,408</u>

⁽¹⁾ Includes assets (other than investments) and liabilities included in the net position of the Common Pension Funds.

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

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for the Common Pension Funds managed by the Division of Investment, which include global equity investments, non-convertible preferred stocks, covered call options, put options, futures contracts, obligations of the U.S. Treasury, government agencies, corporations, international governments and agencies, global diversified credit investments, swap transactions, state and municipal general obligations, public authority revenue obligations, collateralized notes and mortgages, commercial paper, certificates of deposit, repurchase agreements, money market funds, private equity funds, real estate funds, other real assets, absolute return strategy funds, and the CMF.

The asset allocation policy as of June 30, 2017 for JRS, SPRS, TPAF, PFRS and PERS, collectively known as the Pension Funds, is as follows:

Asset Class	Target
Absolute return/risk mitigation	5.00%
Total risk mitigation	5.00%
Cash equivalents	5.50%
U.S. Treasuries	3.00%
Total liquidity	8.50%
Investment grade credit	10.00%
Public high yield	2.50%
Global diversified credit	5.00%
Credit oriented hedge funds	1.00%
Debt related private equity	2.00%
Debt related real estate	1.00%
Total income	21.50%
Private real assets	2.50%
Equity related real estate	6.25%
Total real return	8.75%
U.S. equity	30.00%
Non-U.S. developed markets equity	11.50%
Emerging markets equity	6.50%
Buyouts/venture capital	8.25%
Total global growth	56.25%
Total	100.00%

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

Rate of Return

The annual money-weighted rate of return for the Pension Funds, POPF, CPFPPF and the OPEB plan were 13.01%, 0.53%, 0.53% and 0.58%, respectively. 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

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on a monthly basis and are assumed to occur at the end of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

Deposit and Investment Risk Disclosure

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

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

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.

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The credit ratings and limits for the Pension Funds as of June 30, 2017 are as follows:

Category	Minimum rating ⁽¹⁾			Limitation of issuer's outstanding debt/stock	Limitation of issue	Other limitations
	Moody's	S&P	Fitch			
Certificates of deposit						Split rating allowable. Cannot exceed 10% of issuer's primary capital. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Domestic	A3/P-1	A-/A-1	A-/F-1	—	—	
International	Aa3/P-1	AA-/A-1	AA-/F-1	—	—	
Collateralized notes and mortgages	Baa3	BBB-	BBB-	—	25%	Not more than 5% of fund assets can be invested in one issue. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Commercial paper	P-1	A-1	F-1	—	—	Split rating allowable. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Global debt obligations	Baa3	BBB-	BBB-	10%	—	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Global diversified credit investments:						Not more than 7% 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.
Direct bank loans	Baa3	BBB-	BBB-	10%	—	
Funds	Baa3	BBB-	BBB-	—	—	
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.

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Category	Minimum rating ⁽¹⁾			Limitation of issuer's outstanding debt/stock	Limitation of issue	Other limitations
	Moody's	S&P	Fitch			
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						
Pass-through securities	A3	A-	A-	—	—	Not more than 10% of pension fund assets can be invested in mortgage backed securities.
Senior debt securities	—	—	—	—	25%	
Non-convertible preferred stocks	Baa3	BBB-	BBB-	10%	25%	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Repurchase agreements						
Bank or trust company	—	—	—	—	—	—
Broker	P-1	A-1	F-1	—	—	—
State, municipal and public authority obligations	A3	A-	A-	10%	10%	Not more than 2% of pension fund assets can be invested in debt of any one obligor.
Swap transactions	Baa2	BBB	BBB	—	—	Notional value of net exposure to any one counterparty shall not exceed 1% of pension fund assets. Notional value of all swap transactions shall not exceed 5% of pension fund assets, but may be increased to 10% for a fixed period of time.

⁽¹⁾ Short term ratings (e.g. P-1, A-1, F-1) are used for commercial paper and certificates of deposit.

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, global diversified credit investments, non-convertible preferred stock, and mortgage-backed pass-through securities that do not meet the minimum credit rating requirements set forth above.

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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 fair 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 fair 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.

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The following tables disclose aggregate fair value, by major credit quality rating category as of June 30, 2017 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 Standard & Poor's ratings for fixed income securities not rated by Moody's (in thousands).

	Moody's rating									Totals
	Aaa	Aa	A	Baa	Ba	B	Caa	Ca	C	
Corporate obligations	\$ 686,957	572,701	2,106,255	377,770	282,651	642,516	243,826	3,526	21	4,916,223
Foreign government obligations	611,185	1,510,104	189,611	—	—	—	—	—	—	2,310,900
U.S. Treasury bonds	1,808,266	—	—	—	—	—	—	—	—	1,808,266
International corporate obligations	15,369	49,549	422,646	48,884	68,115	84,192	38,949	1,187	—	728,891
U.S. Treasury TIPS	346,336	—	—	—	—	—	—	—	—	346,336
Federal agency obligations	193,480	—	—	—	—	—	—	—	—	193,480
Mortgages (FHLMC/FNMA/GNMA)	18,870	—	—	—	—	—	—	—	—	18,870
Bank loans	—	—	—	—	1,619	1,328	841	521	—	4,309
SBA pass through certificates	3,869	—	—	—	—	—	—	—	—	3,869
Other	14,152	197,788	141,394	—	—	1,538	—	—	—	354,872
	<u>\$ 3,698,484</u>	<u>2,330,142</u>	<u>2,859,906</u>	<u>426,654</u>	<u>352,385</u>	<u>729,574</u>	<u>283,616</u>	<u>5,234</u>	<u>21</u>	<u>10,686,016</u>

	Standard and Poor's rating							Totals
	AAA	A	BBB	BB	B	CCC	D	
Corporate obligations	\$ —	—	65,173	9,770	5,793	1,351	—	82,087
Foreign government obligations	—	39,318	—	951	—	—	—	40,269
Federal agency obligations	30,703	—	—	—	—	—	—	30,703
Municipal obligations	17,439	7,581	—	—	—	—	—	25,020
International corporate obligations	—	—	1,106	13,544	5,239	1,468	—	21,357
Asset backed securities	—	—	2,998	—	—	—	—	2,998
Bank loans	—	—	—	—	—	—	253	253
	<u>\$ 48,142</u>	<u>46,899</u>	<u>69,277</u>	<u>24,265</u>	<u>11,032</u>	<u>2,819</u>	<u>253</u>	<u>202,687</u>

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 \$442,491,632, and do not have a Moody's or Standard & Poor's rating. The above tables also do not include investment in the Cash Management Fund totaling \$4,033,471,649, 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.

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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, 2017 (in thousands).

Fixed income investment type	Maturities in years				Total fair value
	Less than 1	1-5	6-10	More than 10	
Corporate obligations	\$ 309,096	1,683,544	2,617,481	395,253	5,005,374
Foreign government obligations	83,079	1,151,253	909,279	207,558	2,351,169
U.S. Treasury TIPS	—	62,635	234,019	49,682	346,336
U.S. Treasury bonds	—	576,272	1,092,441	139,553	1,808,266
Federal agency obligations	—	173,591	50,592	—	224,183
International corporate obligations	119,783	214,935	343,773	76,800	755,291
Mortgages (FHLMC/FNMA/GNMA)	—	—	3,772	15,098	18,870
SBA pass through certificates	1,054	2,815	—	—	3,869
Bank loans	286	2,847	1,677	—	4,810
Asset backed securities	—	—	—	2,998	2,998
Municipal obligations	—	45,565	—	274,519	320,084
	<u>\$ 513,298</u>	<u>3,913,457</u>	<u>5,253,034</u>	<u>1,161,461</u>	<u>10,841,250</u>

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, 2017 were \$59,807,936 and \$430,136,637, respectively. These funds have a weighted average duration of 7.98 and 5.90 years, respectively.

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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, 2017 (expressed in U.S. dollars):

<u>Currency</u>	<u>Equities</u>	<u>Fixed income</u>	<u>Alternative investments</u>	<u>Total fair value</u>
Australian dollar	\$ 550,109,874	—	—	550,109,874
Brazilian real	333,024,346	—	—	333,024,346
Canadian dollar	741,468,072	78,052,302	—	819,520,374
Chilean peso	26,935,624	—	—	26,935,624
Colombian peso	—	1,272,219	—	1,272,219
Czech koruna	27,549,330	—	—	27,549,330
Danish krone	146,716,114	—	—	146,716,114
Egyptian pound	136	—	—	136
Euro	2,396,318,779	25,816,927	659,217,570	3,081,353,276
Hong Kong dollar	1,076,004,080	—	—	1,076,004,080
Hungarian forint	58,279,483	—	—	58,279,483
Indonesian rupiah	157,948,966	—	—	157,948,966
Japanese yen	1,893,582,650	—	—	1,893,582,650
Malaysian ringgit	90,821,879	—	—	90,821,879
Mexican peso	124,906,452	—	—	124,906,452
Moroccan dirham	2,733,921	—	—	2,733,921
New Israeli sheqel	5,939,202	—	—	5,939,202
New Taiwan dollar	12,486,506	—	—	12,486,506
New Zealand dollar	5,281,688	—	—	5,281,688
Norwegian krone	55,090,815	—	—	55,090,815
Pakistan rupee	34,138,642	—	—	34,138,642
Philippine peso	49,734,932	—	—	49,734,932
Polish zloty	81,827,125	—	—	81,827,125
Pound sterling (U.K)	1,426,002,576	2,458,807	192,220,679	1,620,682,062
Qatari rial	12,690,427	—	—	12,690,427
Singapore dollar	96,946,469	—	—	96,946,469
South African rand	314,772,096	—	—	314,772,096
South Korean won	695,501,971	—	—	695,501,971
Swedish krona	237,290,586	—	—	237,290,586
Swiss franc	724,514,517	—	—	724,514,517
Thailand baht	106,292,342	—	—	106,292,342
Turkish lira	110,297,644	—	—	110,297,644
Uae dirham	25,252,601	—	—	25,252,601
	<u>\$ 11,620,459,845</u>	<u>107,600,255</u>	<u>851,438,249</u>	<u>12,579,498,349</u>

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The Pension Funds' interests in alternative investments may contain elements of credit, currency and market risk. Such risks include, but are not limited to, limited liquidity, absence of regulatory oversight, dependence upon key individuals, speculative investments (both derivatives and nonmarketable investments), and nondisclosure of portfolio composition. Council regulations provide that not more than 38% of the fair 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%).

Not more than 5% of the fair 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. These investments cannot comprise more than 20% of any one investment managers' total assets.

As of June 30, 2017, the net position of Common Pension Fund E includes receivables of \$302 million related to the secondary sale of real estate funds and 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 Pension Funds have rights to the collateral received. All of the publicly traded securities held in Common Pension Funds, and certain securities held directly by the pension plans, 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, 2017, the Common Pension Funds had no aggregate credit risk exposure to borrowers because the collateral amount held by the Common Pension Funds exceeded the fair value of the securities on loan.

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

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

For securities exposed to credit risk in the collateral portfolio, the following table discloses aggregate fair value, by major credit quality rating category as of June 30, 2017 (in thousands).

	Rating		
	Aaa/AAA	Not rated	Totals
Repurchase agreements	\$ 807,505	—	807,505
State Street Institutional Liquid Reserves Fund	—	157,995	157,995
Cash overdraft	—	(7,159)	(7,159)
	<u>\$ 807,505</u>	<u>150,836</u>	<u>958,341</u>

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 the Pension Funds' name.

As of June 30, 2017, the Pension Funds had outstanding loaned investment securities with an aggregate fair value of \$930,184,975 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 (JRS, SPRS, TPAF, PFRS, and PERS) invest in derivative securities through the Common Pension Funds. A derivative security is an investment whose value is derived from other financial instruments such as commodity prices, bonds and stock prices, or a market index. The Common Pension Funds' derivative securities are considered investment derivative instruments. The fair value of all derivative securities is reported in the statement of fiduciary net position, and the change in fair value is recorded in the statement of changes in fiduciary net position as a net increase or decrease in fair value of investments.

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

The Common Pension Funds may use financial futures to replicate an underlying security or indices they wish to hold in the portfolio. In certain instances, it may be beneficial to own a futures contract rather than the underlying security. Additionally, the Common Pension Funds may use futures contracts to improve the yield or adjust the duration of the fixed income portfolio or may sell futures contracts to hedge the portfolio. A financial futures contract is an agreement between a buyer and a seller that is based on a referenced item, such as financial indices, or interest rates or a financial instrument, such as equity or fixed income securities, physical commodities or currencies. Futures contracts may call for physical delivery of specified quantity of the underlying asset at a specified price (futures or strike price) and date, or be settled in cash. Futures contracts must be traded on a securities exchange or over-the-counter market. The net change in the futures contracts value is settled daily in cash with the exchanges. The cash to fulfill these obligations is held in a margin account. As the fair value of the futures contract varies from the original contract price, a gain or loss is paid to or received from the clearinghouse and recognized in the statement of changes in fiduciary net position. The Common Pension Funds had no investments in futures at June 30, 2017.

Foreign currency forward contracts are used as a means to hedge against currency risks in the Common Pension Fund. 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 it writes (or sells) call options on underlying stocks held by the Common Pension Funds or stock indices. The Common Pension Funds enter into covered put options when it purchases put options on underlying stocks held by the Common Pension Funds or stock indices. The Common Pension Fund enters into put spreads when it purchases put options while simultaneously writing put options on the same underlying securities or indices at a lower strike price. The purchaser of put options pays a premium at the outset of the agreement and stands to gain from an unfavorable change (i.e., a decrease) in the price of the instrument underlying the option. The writer of call options receives a premium at the outset of the agreement and may bear the risk of an unfavorable change (i.e., an increase) in the price of the instrument underlying the option.

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As of June 30, 2017, the Common Pension Fund's derivative investments included foreign currency forward contracts and equity options:

	Notional value (local currency)	Receivable	Payable	Change in fair value
Foreign currency forward contracts:				
Buy				
Euro	888,427	\$ 1,014,191	997,171	17,020
Pound sterling	423,186	549,978	542,357	7,621
Sell:				
Euro	397,667,415	\$ 429,418,949	455,560,356	(26,141,407)
Japanese yen	25,000,000,000	219,849,423	222,793,923	(2,944,500)
Pound sterling	102,519,845	127,308,414	133,485,348	(6,176,934)
Total Forward contracts		\$ <u>778,140,955</u>	<u>813,379,155</u>	<u>(35,238,200)</u>
	Notional value	Fair value	Change in fair value	
Options:				
Purchased Options:				
Puts	\$ 96,936,400	1,222,000	(102,000)	
Written Options:				
Put	96,936,400	(490,000)	122,000	
Call	235,487,800	(682,000)	259,810	
Total Options	\$ <u>429,360,600</u>	<u>50,000</u>	<u>279,810</u>	

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.

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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.

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.
- Options 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.
- Distributions from private equity 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, 2017, 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 per share (or its equivalent) is presented in the table below.

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The following table summarizes the fair value hierarchy of the investment portfolio as of June 30, 2017 (in thousands):

	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>
Investments by fair value			
Equity securities			
Domestic equities	\$ 22,641,596	22,638,722	2,874
International equities	13,457,534	13,437,346	20,188
Equity mutual funds	3,019,184	3,019,184	—
Exchange traded funds	1,190,146	1,190,146	—
Total equity securities	<u>40,308,460</u>	<u>40,285,398</u>	<u>23,062</u>
Debt securities			
Corporate obligations	5,005,374	—	5,005,374
Foreign government obligations	2,351,169	—	2,351,169
U.S. Treasury bonds	1,808,266	—	1,808,266
International corporate obligations	755,291	—	755,291
U.S. Treasury Tips	346,336	—	346,336
Municipal obligations	320,084	—	320,084
Federal agency obligations	224,183	—	224,183
Fixed income mutual funds	430,137	430,137	—
Exchanged traded funds	59,808	59,808	—
Mortgages (FHLMC/FNMA/GNMA)	18,870	—	18,870
Bank loans	4,810	—	4,810
SBA pass through certificates	3,869	—	3,869
Asset backed securities	2,998	—	2,998
Total debt securities	<u>11,331,195</u>	<u>489,945</u>	<u>10,841,250</u>
Total investments by fair value level	51,639,655	<u>40,775,343</u>	<u>10,864,312</u>
Investments measured at the net asset value (NAV)			
Buyout private equity funds	6,597,374		
Global diversified credit funds	3,427,816		
Real estate funds - equity	3,114,442		
Credit oriented hedge funds	2,345,956		
Real assets	1,829,032		
Multi-strategy hedge funds	1,482,271		
Opportunistic hedge funds	1,067,504		
Equity oriented hedge funds	1,016,311		
Debt related private equity funds	698,506		
Venture capital private equity funds	481,958		
Real estate funds - debt	446,767		
Opportunistic private equity investments	341,987		
Secondary private equity funds	63,446		
Total investments measured at NAV	<u>22,913,370</u>		
Local Government Investment Pool			
Cash Management Fund	4,033,471		
Total investments measured at fair value	<u>\$ 78,586,496</u>		
Investment derivative instruments			
Put options (assets)	\$ 1,222	1,222	—
Foreign currency forward contracts (assets)	778,141	—	778,141
Foreign currency forward contracts (liabilities)	(813,379)	—	(813,379)
Options written (liabilities)	(1,172)	(1,172)	—
Total investment derivative instruments	<u>\$ (35,188)</u>	<u>50</u>	<u>(35,238)</u>

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The following table represents the unfunded commitments, redemptions frequency and redemption notice period for investments measured at NAV as of June 30, 2017 (in thousands).

	<u>Fair Value</u>	<u>Unfunded Commitments</u>	<u>Frequency (if currently Eligible)</u>	<u>Redemption Notice Period</u>
Buyout private equity funds ⁽¹⁾	\$ 6,597,374	3,301,083	None	N/A
Global diversified credit funds ⁽²⁾	3,427,816	1,778,204	Semi-annual	90 days
Real estate funds - equity ⁽³⁾	3,114,442	1,854,250	Quarterly	90 days
Credit oriented hedge funds ⁽⁴⁾	2,345,956	125,000	Monthly, quarterly, semi-annual, annually	45-60 days
Real assets ⁽⁵⁾	1,829,032	1,056,091	Daily, monthly	1-30 days
Multi-strategy hedge funds ⁽⁶⁾	1,482,271	58,741	Quarterly, semi-annual	None
Opportunistic hedge funds ⁽⁷⁾	1,067,504	45,000	Monthly, quarterly	2-90 days
Equity oriented hedge funds ⁽⁸⁾	1,016,311	187,458	Quarterly, semi- annual, annually	45-92 days
Debt related private equity funds ⁽⁹⁾	698,506	866,259	None	N/A
Venture capital private equity funds ⁽¹⁰⁾	481,958	87,954	None	N/A
Real estate funds - debt ⁽¹¹⁾	446,767	429,300	Quarterly	90 days
Opportunistic private equity funds ⁽¹²⁾	341,987	298,315	None	N/A
Secondary private equity funds ⁽¹³⁾	63,446	28,093	None	N/A
Total investment measured at the NAV	<u>\$ 22,913,370</u>	<u>10,115,748</u>		

- Buyout private equity funds include investments in 75 partnership 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. It is expected that the underlying assets will be liquidated over the next 1 to 12 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
- Global diversified credit funds include investments in 15 funds and separate account investments that make investment in mezzanine debt, credit structured products, commercial and residential mortgage-backed securities, commercial and residential whole loans, and other similar strategies. Investments in this type cannot be redeemed because the investments include restrictions. As of June 30, 2017, these remaining redemption restriction periods range from 30 to 84 months. It is expected that the underlying assets will be liquidated over the next 3 to 7 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
- Real estate funds - equity include investments in 46 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 59% of real estate equity investments can never be redeemed. Distributions from each fund and separate account will be received as the underlying investments are liquidated. It is expected that the

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underlying assets will be liquidated over the next 1 to 12 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.

4. Credit oriented hedge funds include investments in 13 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. These securities are often illiquid. Investments representing approximately 60% of the value of the investments cannot be redeemed because the investment includes restrictions that do not allow for redemptions. As of June 30, 2017, these remaining redemption restriction periods range from 3 to 30 months. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
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. Investments representing approximately 92% of the value of the investments can never be redeemed. 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 2 to 12 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
6. Multi-strategy hedge funds include investments in 9 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. Investments representing approximately 56% of the value of the investments cannot be redeemed because the investment includes restrictions that do not allow for redemptions. As of June 30, 2017, the remaining redemption restriction periods range from 6 to 18 months. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments.
7. Opportunistic hedge funds include investments in 5 hedge funds that invest in speculative opportunities with high net market exposure across varied markets. Opportunistic funds include global macro funds, commodity trading advisor funds, and funds employing other similar strategies. Investments representing approximately 33% of the value of the investments in this type cannot be redeemed because the investments include restrictions. As of June 30, 2017, this remaining redemption restriction period is 18 months. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
8. Equity oriented hedge funds include investments in 9 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. Investments representing approximately 29% of the value of the investments cannot be redeemed because the investment includes restrictions that do not allow for redemptions. As of June 30, 2017, these remaining redemption restriction periods range from 9 to 36 months. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
9. Debt related private equity funds include investments in 25 funds employing distressed, turnaround and mezzanine debt strategies. Distressed debt involves purchasing debt securities that are trading at a

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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. 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 12 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.

10. 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 1 to 12 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
11. Real estate funds - debt include investments in 7 funds or separate accounts that make investments in the debt of the underlying asset, where the investor acts as a lender to the property owner and receives an interest rate on the loan. Investments representing approximately 61% of real estate debt investments can never be redeemed. 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 4 to 9 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
12. Opportunistic private equity funds include investments in 3 funds and separate accounts, which acquire minority equity interests in investment management companies. Investments representing approximately 80% of the value of the investments have a perpetual term and cannot be redeemed. Investments representing approximately 20% of the value of the investments can be redeemed after 8 years or December 2025. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.
13. Secondary private equity funds include investments in 4 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 2 to 10 years. The fair value of the investments in this type have been determined using the NAV per share (or its equivalent) of the investment.

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

As discussed in Note 1, in the fiscal year ended June 30, 2009, the State passed Chapter 19, P.L. 2009 to allow local employers of PFRS and PERS to contribute 50% of the normal and accrued liability contributions amounts, while deferring the remaining amount for a 15-year period with payments beginning in the fiscal year ended June 30, 2012. At June 30, 2017, the remaining receivable balances related to Chapter 19, P.L. 2009 were \$116.2 million and \$39.1 million for PFRS and PERS, respectively.

(10) Reserves

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

Members' Annuity Savings Reserve and Accumulative Interest Reserve – JRS (\$70,319,118); SPRS (\$212,674,110); TPAF (\$12,531,120,389); PFRS (\$3,752,205,896); PERS (\$14,571,683,577)

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 (\$-91,660,071); SPRS (\$862,021,018); TPAF (\$-27,927,869,120); PERS (\$-17,308,333,750)

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 (\$196,666,286); SPRS (\$686,802,207); TPAF (\$38,452,910,560); PFRS (\$25,282,180,037); PERS (\$30,976,473,916)

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 (7.65% for State fiscal year 2017) is credited to the Retirement Reserve.

Retirement Reserve – POPF (\$5,620,868)

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

Non-Contributory Group Insurance Premium Reserve – PFRS – Local (\$34,659,280); PERS – Local (\$64,452,031)

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

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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 a zero balance as these premium expenses are funded on a monthly basis.

Pension Accumulation Reserve – PFRS (\$-3,221,326,814)

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 – CPFPP (\$1,904,496)

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

Benefit Enhancement Reserve – PERS – Local (\$159,963,744)

The Benefit Enhancement Reserve (NJSA: 43:15A-22) is a special reserve from which the required normal contributions to provide benefit increases under Chapter 353, P.L. 2001 and Chapter 133, P.L. 2001 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 (\$213,255,917)

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.

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Various reserve balances as of June 30, 2017 are as follows:

	Pension Reserves	Other Postemployment Benefit Plan Reserves
Members' Annuity Savings Reserve and Accumulated Interest Reserve	\$ 31,138,003,090	—
Contingent Reserve	(44,465,841,923)	—
Retirement Reserve	95,600,653,874	—
Non-Contributory Group Insurance Premium Reserve	99,111,311	—
Pension Accumulation Reserve	(3,221,326,814)	—
Pension Reserve	1,904,496	—
SHBP Reserve	—	213,255,917
Benefit Enhancement Reserve	159,963,744	—
Variable Accumulation Reserve (N.J.S.A.: NJSEDCP (52:18A-164), SACT (52:18A-109))	—	—
Variable Benefits Reserve (N.J.S.A.: SACT 52:18A-109)	40,579,416	—
Total	\$ 83,526,440,676	213,255,917

(11) Contingencies

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

STATE OF NEW JERSEY
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Required Supplementary Information

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

Judicial Retirement System

(Unaudited)

June 30, 2017

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability:				
Service cost	\$ 37,224,230	33,333,864	30,702,986	32,123,341
Interest on total pension liability	30,788,977	36,471,524	41,473,055	40,332,123
Effect of economic/demographic (gains) or losses	14,120,673	254,822	(1,733,197)	—
Effect of assumptions changes or inputs	(70,235,370)	85,677,552	(41,873,530)	26,907,821
Transfers from other systems	1,121,097	726,284	2,081,523	—
Benefit payments	<u>(56,365,718)</u>	<u>(54,686,521)</u>	<u>(52,430,016)</u>	<u>(49,604,080)</u>
Net change in total pension liability	(43,346,111)	101,777,525	(21,779,179)	49,759,205
Total pension liability-beginning	<u>980,742,106</u>	<u>878,964,581</u>	<u>900,743,760</u>	<u>850,984,555</u>
Total pension liability-ending (a)	<u>\$ 937,395,995</u>	<u>980,742,106</u>	<u>878,964,581</u>	<u>900,743,760</u>
Plan fiduciary net pension:				
Contributions-employer	\$ 20,341,379	14,794,774	17,031,026	15,874,857
Contributions-employee	10,348,191	9,271,869	6,310,124	5,096,577
Net investment (loss) income	20,031,152	(2,721,949)	8,475,641	34,448,036
Transfers from other systems	1,121,097	726,284	2,081,523	—
Benefit payments, including refunds of employee contributions	(56,365,718)	(54,686,521)	(52,430,016)	(49,604,080)
Administrative expense	<u>(150,588)</u>	<u>(168,008)</u>	<u>(168,762)</u>	<u>(162,372)</u>
Net change in Plan fiduciary net position	(4,674,487)	(32,783,551)	(18,700,464)	5,653,018
Plan fiduciary net position-beginning	179,999,820	212,783,371	231,483,835	225,830,817
Plan fiduciary net position-ending (b)	<u>175,325,333</u>	<u>179,999,820</u>	<u>212,783,371</u>	<u>231,483,835</u>
Plan's net pension liability-ending (a)-(b)	<u>\$ 762,070,662</u>	<u>800,742,286</u>	<u>666,181,210</u>	<u>669,259,925</u>
Plan fiduciary net position as a percentage of the total pension liability	18.70%	18.35%	24.21%	25.70%
Covered-employee payroll	\$ 68,062,584	67,097,166	66,028,491	67,810,110
Net pension liability as a percentage of covered-employee payroll	1119.66%	1193.41%	1008.93%	986.96%

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

Notes to Schedule:

Changes in benefit terms:

None

Changes in assumptions:

For 2017, the discount rate changed to 3.83% and the long-term expected rate of return changed to 7.00%. For 2016, the discount rate changed to 3.11% and the long-term expected rate of return changed to 7.65% from 7.90%. Further, salary increases were assumed to increase 2.00% through fiscal year 2025 and 3.00% for each fiscal year thereafter. For 2015, the discount rate changed to 4.12% and the demographic assumptions were revised to reflect those recommended on the basis of the July 1, 2011 - June 30, 2014 experience study. For 2014, the discount rate was 4.58%

See accompanying independent auditors' report.

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Required Supplementary Information

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

Prison Officers' Pension Fund

(Unaudited)

June 30, 2017

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability:				
Service cost	\$ —	—	—	—
Interest on total pension liability	198,788	251,254	331,362	401,659
Effect of economic/demographic (gains) or losses	82,047	96,657	(296,620)	—
Effect of assumptions changes or inputs	(240,233)	1,171,953	163,490	129,449
Transfers from other systems	—	—	—	—
Benefit payments	<u>(1,069,209)</u>	<u>(1,240,307)</u>	<u>(1,377,505)</u>	<u>(1,583,408)</u>
Net change in total pension liability	(1,028,607)	279,557	(1,179,273)	(1,052,300)
Total pension liability-beginning	<u>7,505,870</u>	<u>7,226,313</u>	<u>8,405,586</u>	<u>9,457,886</u>
Total pension liability-ending (a)	<u>\$ 6,477,263</u>	<u>7,505,870</u>	<u>7,226,313</u>	<u>8,405,586</u>
Plan fiduciary net pension:				
Contributions-employer	\$ 552,131	634,217	698,360	793,174
Net investment income	30,847	18,067	6,355	7,368
Benefit payments, including refunds of employee contributions	(1,069,209)	(1,240,307)	(1,377,505)	(1,583,408)
Administrative expense	<u>(4,134)</u>	<u>(5,312)</u>	<u>(5,843)</u>	<u>(5,853)</u>
Net change in Plan fiduciary net position	(490,365)	(593,335)	(678,633)	(788,719)
Plan fiduciary net position-beginning	6,111,233	6,704,568	7,383,201	8,171,920
Plan fiduciary net position-ending (b)	<u>5,620,868</u>	<u>6,111,233</u>	<u>6,704,568</u>	<u>7,383,201</u>
Plan's net pension liability-ending (a)-(b)	<u>\$ 856,395</u>	<u>1,394,637</u>	<u>521,745</u>	<u>1,022,385</u>
Plan fiduciary net position as a percentage of the total pension liability	86.78%	81.42%	92.78%	87.84%
Covered-employee payroll	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

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:

For 2017, the discount rate changed to 3.58%. For 2016, the discount rate changed to 2.85%. Further, 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. For 2016, the discount rate changed to 2.85%. For 2015, the discount rate was 3.80%.

See accompanying independent auditors' report

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

State Police Retirement System

(Unaudited)

June 30, 2017

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability:				
Service cost	\$ 139,506,057	113,546,510	93,740,921	93,623,020
Interest on total pension liability	202,545,532	221,675,495	216,980,562	209,010,706
Effect of economic/demographic (gains) or losses	23,786,696	(17,580,385)	35,245,543	—
Effect of assumptions changes or inputs	(697,970,471)	747,941,075	435,691,094	92,686,900
Transfers from other systems	3,925	54,000	222,557	—
Benefit payments	<u>(217,303,946)</u>	<u>(213,436,150)</u>	<u>(206,493,624)</u>	<u>(197,958,938)</u>
Net change in total pension liability	(549,432,207)	852,200,545	575,387,053	197,361,688
Total pension liability-beginning	<u>5,673,706,321</u>	<u>4,821,505,776</u>	<u>4,246,118,723</u>	<u>4,048,757,035</u>
Total pension liability-ending (a)	<u>\$ 5,124,274,114</u>	<u>5,673,706,321</u>	<u>4,821,505,776</u>	<u>4,246,118,723</u>
Plan fiduciary net pension:				
Contributions-employer	\$ 53,006,614	37,435,541	38,527,297	36,436,923
Contributions-employee	23,721,785	22,818,295	22,315,431	24,034,496
Net investment (loss) income	207,401,590	(19,284,054)	75,532,779	287,098,217
Transfers from other systems	3,925	54,000	222,557	—
Benefit payments, including refunds of employee contributions	(217,303,946)	(213,436,150)	(206,493,624)	(197,958,938)
Administrative expense	<u>(294,745)</u>	<u>(334,630)</u>	<u>(351,724)</u>	<u>(280,026)</u>
Net change in Plan fiduciary net position	66,535,223	(172,746,998)	(70,247,284)	149,330,672
Plan fiduciary net position-beginning	1,694,962,112	1,867,709,110	1,937,956,394	1,788,625,722
Plan fiduciary net position-ending (b)	<u>1,761,497,335</u>	<u>1,694,962,112</u>	<u>1,867,709,110</u>	<u>1,937,956,394</u>
Plan's net pension liability-ending (a)-(b)	<u>\$ 3,362,776,779</u>	<u>3,978,744,209</u>	<u>2,953,796,666</u>	<u>2,308,162,329</u>
Plan fiduciary net position as a percentage of the total pension liability	34.38%	29.87%	38.74%	45.64%
Covered-employee payroll	\$ 277,771,135	275,477,457	262,496,289	262,063,829
Net pension liability as a percentage of covered-employee payroll	1210.63%	1444.31%	1125.27%	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:

In 2017, Chapter 26, P.L. 2016 amended statutes to change the definition of child to include a child 18 years of age or older and enrolled in a secondary school, or under the age of 24 and enrolled in a degree program in an institution of higher education for at least 12 credits in each semester, provided that the member died in the line of duty while in active service. It also increases the accidental death benefit payable to childrer if there is no surviving spouse to 70% of final compensation.

Changes in assumptions:

For 2017, the discount rate changed to 4.42% and the long-term expected rate of return changed to 7.00%. For 2016, the discount rate changed to 3.55% and the long-term expected rate of return changed to 7.65% from 7.90%. Further, salary increases were assumed to increased 2.95% through fiscal year 2025 and 3.95% for each fiscal year thereafter. For 2015, the discount rate changed to 4.59% and the demographic assumptions were revised to reflect those recommended on the basis of the July 1, 2011 - June 30, 2014 experience study. In addition, the social security wage base was set at \$118,500 for 2015, increasing 4.00% per annum, compounded annually and the 401(a)(17) pay limit was set at \$265,000 for 2015, increasing 3.00% per annum, compounded annually. For 2014, the discount rate was 5.12%

See accompanying independent auditors' report.

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

Consolidated Police and Firemen's Pension Fund

(Unaudited)

June 30, 2017

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability:				
Service cost	\$ —	—	—	—
Interest on total pension liability	260,211	352,889	504,066	632,080
Effect of economic/demographic (gains) or losses	(984,588)	(71,313)	(993,528)	—
Effect of assumptions changes or inputs	(236,022)	1,273,909	193,719	163,528
Benefit payments	<u>(1,535,623)</u>	<u>(1,881,252)</u>	<u>(2,445,627)</u>	<u>(2,942,035)</u>
Net change in total pension liability	(2,496,022)	(325,767)	(2,741,370)	(2,146,427)
Total pension liability-beginning	<u>9,892,635</u>	<u>10,218,402</u>	<u>12,959,772</u>	<u>15,106,199</u>
Total pension liability-ending (a)	<u>\$ 7,396,613</u>	<u>9,892,635</u>	<u>10,218,402</u>	<u>12,959,772</u>
Plan fiduciary net pension:				
Contributions-employer	\$ 1,539,280	1,344,017	1,577,751	1,900,831
Net investment income	10,099	10,856	198	585
Benefit payments, including refunds of employee contributions	(1,535,623)	(1,881,252)	(2,445,627)	(2,942,035)
Administrative expense	<u>(4,188)</u>	<u>(6,643)</u>	<u>(8,003)</u>	<u>(9,566)</u>
Net change in Plan fiduciary net position	9,568	(533,022)	(875,681)	(1,050,185)
Plan fiduciary net position-beginning	1,894,928	2,427,950	3,303,631	4,353,816
Plan fiduciary net position-ending (b)	<u>1,904,496</u>	<u>1,894,928</u>	<u>2,427,950</u>	<u>3,303,631</u>
Plan's net pension liability-ending (a)-(b)	<u>\$ 5,492,117</u>	<u>7,997,707</u>	<u>7,790,452</u>	<u>9,656,141</u>
Plan fiduciary net position as a percentage of the total pension liability	25.75%	19.15%	23.76%	25.49%
Covered-employee payroll	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

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:

For 2017, the discount rate changed to 3.58%. For 2016, the discount rate changed to 2.85%. Further, 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. For 2015, the discount rate changed to 3.80%. For 2014, the discount rate was 4.29%.

See accompanying independent auditors' report.

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

Teachers' Pension and Annuity Fund

(Unaudited)

June 30, 2017

	2017	2016	2015	2014
Total pension liability:				
Service cost	\$ 3,028,689,581	2,344,321,810	2,022,411,197	1,870,901,832
Interest on total pension liability	3,304,988,177	3,694,844,118	3,797,032,970	3,794,362,523
Effect of economic/demographic (gains) or losses	236,377,556	(134,644,168)	365,228,279	(24,898,221)
Effect of assumptions changes or inputs	(13,285,524,000)	10,827,093,000	5,913,556,000	2,614,173,709
Transfers from other systems	1,338,431	1,564,002	4,117,141	—
Benefit payments	(4,306,268,745)	(4,169,070,762)	(4,015,003,587)	(3,837,859,513)
Net change in total pension liability	(11,020,399,000)	12,564,108,000	8,087,342,000	4,416,680,330
Total pension liability-beginning	101,746,770,000	89,182,662,000	81,095,320,000	76,678,639,670
Total pension liability-ending (a)	\$ 90,726,371,000	101,746,770,000	89,182,662,000	81,095,320,000
Plan fiduciary net pension:				
Contributions-employer	\$ 1,404,292	1,105,810	807,246	4,688,045
Contributions-nonemployer	1,125,614,188	798,963,467	539,796,289	423,012,101
Contributions-employee	790,788,033	761,711,695	740,296,265	716,183,306
Net investment (loss) income	2,736,988,791	(267,684,353)	1,066,062,926	4,100,273,453
Transfers from other systems	1,338,431	1,564,002	4,117,141	—
Other	357,659	243,660	358,899	—
Benefit payments, including refunds of employee contributions	(4,306,268,745)	(4,169,070,762)	(4,015,003,587)	(3,837,859,513)
Administrative expense	(11,923,787)	(13,768,112)	(13,890,080)	(12,170,971)
Net change in Plan fiduciary net position	338,298,862	(2,886,934,593)	(1,677,454,901)	1,394,126,421
Plan fiduciary net position-beginning	22,717,862,967	25,604,797,560	27,282,252,461	25,888,126,040
Plan fiduciary net position-ending (b)	23,056,161,829	22,717,862,967	25,604,797,560	27,282,252,461
Plan's net pension liability-ending (a)-(b)	\$ 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	25.41%	22.33%	28.71%	33.64%
Covered-employee payroll	\$ 10,436,205,103	10,305,472,484	10,162,263,470	10,038,792,896
Net pension liability as a percentage of covered-employee payroll	648.42%	766.86%	625.63%	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:

None

Changes in assumptions:

For 2017, the discount rate changed to 4.25% and the long-term expected rate of return changed to 7.00%. For 2016, the discount rate changed to 3.22% and the long-term expected rate of return changed to 7.65% from 7.90%. Further, the demographic assumptions were revised to reflect those recommended on the basis of the July 1, 2012 - June 30, 2015 experience study. For 2015, the discount rate changed to 4.13%. For 2014, the discount rate was at 4.68%.

See accompanying independent auditors' report.

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

Police and Firemen's Retirement System

(Unaudited)

June 30, 2017

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability:				
Service cost	\$ 1,136,338,028	1,148,613,712	994,248,683	1,079,166,175
Interest on total pension liability	2,738,598,309	2,751,445,220	2,680,664,300	2,535,619,539
Effect of economic/demographic (gains) or losses	89,364,940	(34,916,637)	(215,122,438)	—
Effect of assumptions changes or inputs	(3,534,553,975)	343,078,737	3,755,474,472	649,814,155
Transfers from other systems	289,960	358,929	800,782	—
Benefit payments	<u>(2,421,485,437)</u>	<u>(2,324,175,953)</u>	<u>(2,205,464,297)</u>	<u>(2,105,829,011)</u>
Net change in total pension liability	(1,991,448,175)	1,884,404,008	5,010,601,502	2,158,770,858
Total pension liability-beginning	<u>49,402,169,913</u>	<u>47,517,765,905</u>	<u>42,507,164,403</u>	<u>40,348,393,545</u>
Total pension liability-ending (a)	<u>\$ 47,410,721,738</u>	<u>49,402,169,913</u>	<u>47,517,765,905</u>	<u>42,507,164,403</u>
Plan fiduciary net pension:				
Contributions-employer	\$ 1,002,043,734	900,033,567	883,776,917	858,047,628
Contributions-nonemployer	86,467,000	61,466,000	76,038,000	—
Contributions-employee	395,878,384	388,681,408	386,991,641	385,660,096
Net investment (loss) income	2,791,104,860	(150,693,159)	922,598,676	3,381,553,869
Transfers from other systems	289,960	358,929	800,782	—
Employer specific contributions - additional contribution	268,910	1,923,531	535,424	—
Employer specific contributions - delayed appropriation	892,514	763,176	865,936	—
Employer specific contributions - delayed enrollments	179,386	142,034	224,629	—
Employer specific contributions - retroactive	11,476,881	3,661,101	24,536,440	—
Benefit payments, including refunds of employee contributions	(2,421,485,437)	(2,324,175,953)	(2,205,464,297)	(2,105,829,011)
Administrative expense	<u>(4,124,457)</u>	<u>(4,292,891)</u>	<u>(4,531,012)</u>	<u>(3,884,342)</u>
Net change in Plan fiduciary net position	1,862,991,735	(1,122,132,257)	86,373,136	2,515,548,240
Plan fiduciary net position-beginning	23,984,726,664	25,106,858,921	25,020,485,785	22,504,937,545
Plan fiduciary net position-ending (b)	<u>25,847,718,399</u>	<u>23,984,726,664</u>	<u>25,106,858,921</u>	<u>25,020,485,785</u>
Plan's net pension liability-ending (a)-(b)	<u>\$ 21,563,003,339</u>	<u>25,417,443,249</u>	<u>22,410,906,984</u>	<u>17,486,678,618</u>
Plan fiduciary net position as a percentage of the total pension liability	54.52%	48.55%	52.84%	58.86%
Covered-employee payroll	\$ 3,726,807,562	3,695,509,355	3,682,677,356	3,678,910,266
Net pension liability as a percentage of covered-employee payroll	578.59%	687.79%	608.55%	475.32%

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

Notes to Schedule:

Changes in benefit terms:

In 2017, Chapter 26, P.L. 2016 increased the accidental death benefit payable to children if there is no surviving spouse to 70% of final compensation.

Changes in assumptions:

For 2017, the discount rate changed to 6.14% and the long-term rate of return changed to 7.00%. For 2016, the discount rate changed to 5.55%, the long-term expected rate of return changed to 7.65% from 7.90%, and 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, the discount rate changed to 5.79% and demographic assumptions were revised in accordance with the results of the July 1, 2010 - June 30, 2013 experience study. For 2014, the discount rate was 6.32%

See accompanying independent auditors' report.

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

Public Employees' Retirement System

(Unaudited)

June 30, 2017

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability:				
Service cost	\$ 1,865,398,219	1,628,065,678	1,523,631,386	1,592,214,831
Interest on total pension liability	3,412,789,012	3,653,373,426	3,647,688,354	3,506,486,225
Effect of economic/demographic (gains) or losses	306,941,390	600,806,505	1,050,795,158	—
Effect of assumptions changes or inputs	(10,156,789,076)	8,792,817,065	4,091,557,460	1,222,437,554
Transfers from other systems	854,976	778,753	1,651,542	—
Benefit payments	<u>(3,810,818,692)</u>	<u>(3,629,651,915)</u>	<u>(3,441,046,065)</u>	<u>(3,259,290,114)</u>
Net change in total pension liability	(8,381,624,171)	11,046,189,512	6,874,277,835	3,061,848,496
Total pension liability-beginning	<u>85,769,888,074</u>	<u>74,723,698,562</u>	<u>67,849,420,727</u>	<u>64,787,572,231</u>
Total pension liability-ending (a)	<u>\$ 77,388,263,903</u>	<u>85,769,888,074</u>	<u>74,723,698,562</u>	<u>67,849,420,727</u>
Plan fiduciary net pension:				
Contributions-employer	\$ 1,465,931,579	1,273,425,342	1,085,237,214	917,689,000
Contributions-employee	847,952,137	821,305,787	805,232,235	797,818,225
Net investment (loss) income	3,202,393,837	(237,215,643)	1,117,827,113	4,102,964,869
Transfers from other systems	854,976	778,753	1,651,542	—
Employer specific contributions - additional contribution	25,676	257,850	111,824	—
Employer specific contributions - delayed appropriation	3,224,612	1,721,199	1,664,415	—
Employer specific contributions - delayed enrollments	1,030,774	532,612	594,843	—
Employer specific contributions - retroactive	11,230,521	687,225	6,504,878	—
Other	(7,797)	(51,586)	(31,006)	—
Benefit payments, including refunds of employee contributions	(3,810,818,692)	(3,629,651,915)	(3,441,046,065)	(3,259,290,114)
Administrative expense	<u>(19,648,715)</u>	<u>(23,285,920)</u>	<u>(23,761,860)</u>	<u>(21,756,019)</u>
Net change in Plan fiduciary net position	1,702,168,908	(1,791,496,296)	(446,014,867)	2,537,425,961
Plan fiduciary net position-beginning	26,762,070,610	28,553,566,906	28,999,581,773	26,462,155,812
Plan fiduciary net position-ending (b)	<u>28,464,239,518</u>	<u>26,762,070,610</u>	<u>28,553,566,906</u>	<u>28,999,581,773</u>
Plan's net pension liability-ending (a)-(b)	<u>\$ 48,924,024,385</u>	<u>59,007,817,464</u>	<u>46,170,131,656</u>	<u>38,849,838,954</u>
Plan fiduciary net position as a percentage of the total pension liability	36.78%	31.20%	38.21%	42.74%
Covered-employee payroll	\$ 11,296,345,312	11,320,198,747	11,441,433,226	11,448,531,265
Net pension liability as a percentage of covered-employee payroll	433.10%	521.26%	403.53%	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:

None

Changes in assumptions:

For 2017, the discount rate changed to 5.00% and the long-term rate of return changed to 7.00%. For 2016, the discount rate changed to 3.98%, the long-term expected rate of return changed to 7.65% from 7.90%, demographic assumptions were revised in accordance with the results of the July 1, 2011 - June 30, 2014 experience study and the mortality improvement scale incorporated the plan actuary's modified MP-2014 projection scale. Further, salary increases were assumed to increase between 1.65% and 4.15% (based on age) through fiscal year 2026 and 2.65% and 5.15% (based on age) for each fiscal year thereafter. For 2015, the discount rate changed to 4.90%. In addition, the social security wage base was set at \$118,500 for 2015, increasing 4.00% per annum, compounded annually and the 401(a)(17) pay limit was set at \$265,000 for 2015, increasing 3.00% per annum, compounded annually. For 2014, the discount rate was 5.39%.

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Required Supplementary Information

Schedule of Employer Contributions - Defined Benefit Pension Plans

(Unaudited)

	<u>Actuarially determined contribution</u>	<u>Actual employer contribution</u>	<u>Contribution excess (deficiency)</u>	<u>Covered payroll</u>	<u>Contribution as a percentage of covered payroll</u>
Judicial Retirement System					
Year ended June 30:					
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
2010	32,540,704	1,032,857	(31,507,847)	70,133,372	1.47
2009	29,809,782	1,696,843	(28,112,939)	67,159,516	2.53
2008	27,171,100	12,913,890	(14,257,210)	63,144,685	20.45
Prison Officers' Pension Fund					
Year ended June 30:					
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
2010	—	—	—	N/A	N/A
2009	—	—	—	N/A	N/A
2008	—	—	—	N/A	N/A
State Police Retirement System					
Year ended June 30:					
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	36,379,273	(68,714,105)	262,063,829	13.88
2013	99,876,582	27,777,047	(72,099,535)	283,219,927	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
2010	91,411,237	1,018,200	(90,393,037)	287,267,502	0.35
2009	86,385,254	5,574,860	(80,810,394)	281,087,566	1.98
2008	78,761,279	36,443,502	(42,317,777)	275,301,995	13.24

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Required Supplementary Information

Schedule of Employer Contributions - Defined Benefit Pension Plans

(Unaudited)

	<u>Actuarially determined contribution</u>	<u>Actual employer contribution</u>	<u>Contribution excess (deficiency)</u>	<u>Covered payroll</u>	<u>Contribution as a percentage of covered payroll</u>
Consolidated Police and Firemen's Pension Fund					
Year ended June 30:					
2017	\$ 884,680	575,000	(309,680)	N/A	N/A
2016	491,683	148,000	(343,683)	N/A	N/A
2015	—	—	—	N/A	N/A
2014	864,041	—	(864,041)	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
2010	1,678,690	—	(1,678,690)	N/A	N/A
2009	1,824,798	1,256,000	(568,798)	N/A	N/A
2008	2,388,591	523,000	(1,865,591)	N/A	N/A
Teachers' Pension and Annuity Fund					
Year ended June 30:					
2017	\$ 2,737,175,151	1,087,919,000	(1,649,256,151)	10,436,205,103	10.42%
2016	2,544,811,534	764,489,000	(1,780,322,534)	10,305,472,484	7.42
2015	2,306,611,715	504,320,000	(1,802,291,715)	10,162,263,470	4.96
2014	2,158,287,358	392,035,985	(1,766,251,373)	10,038,792,896	3.91
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	—
2010	1,796,358,016	33,199,655	(1,763,158,361)	9,747,020,060	—
2009	1,601,478,508	95,863,972	(1,505,614,536)	9,419,083,203	1.02
2008	1,550,503,836	695,275,811	(855,228,025)	9,077,628,813	7.66
Police and Firemen's Retirement System					
Year ended June 30:					
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
2010	1,161,763,447	758,722,185	(403,041,262)	3,673,674,523	20.65
2009	1,048,234,663	716,491,044	(331,743,619)	3,596,254,177	19.92
2008	960,856,263	780,799,395	(180,056,868)	3,459,839,699	22.57

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Required Supplementary Information

Schedule of Employer Contributions - Defined Benefit Pension Plans

(Unaudited)

	<u>Actuarially determined contribution</u>	<u>Actual employer contribution</u>	<u>Contribution excess (deficiency)</u>	<u>Covered payroll</u>	<u>Contribution as a percentage of covered payroll</u>
	Public Employees' Retirement System				
Year ended June 30:					
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
2010	1,422,475,763	640,282,996	(782,192,767)	11,995,447,141	5.34
2009	1,285,791,399	627,989,949	(657,801,450)	11,815,800,825	5.31
2008	1,145,564,136	646,690,366	(498,873,770)	11,418,467,816	5.66

See accompanying independent auditors' report.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

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	CPFPP	TPAF	PFRS	PERS
Actuarial cost method	Projected Unit Credit	Projected Unit Credit	Projected Unit Credit	Projected Unit Credit	Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Amortization method	Level Dollar, open	Level Dollar, open	Level Dollar, open	Level Dollar, open	Level Dollar, open	Level Dollar, open	Level Dollar, open
Remaining amortization period	30 years	1 year	30 years	30 years	30 years	30 years	30 years
Asset valuation method	Five-year average of market values	Five-year average of market values	Five-year average of market values	Five-year average of market values	20% of the difference between the expected Actuarial Value and market value is recognized each year	Five-year average of market values	Five-year average of market values
Inflation	2.25%	2.25%	2.25%	2.25%	2.3 until June 30, 2026 / 3.6% thereafter	2.25%	2.25%
Projected salary increase 2017 and 2016							
Initial fiscal year applied through	2025	N/A [^]	2025	N/A [^]	N/A	2026	2026
Rate	2.00%	N/A [^]	2.95%	N/A [^]	Varies based on experience	2.10 - 8.98% based on age	1.65 - 4.15% based on age
Thereafter	3.00%	N/A [^]	3.95%	N/A [^]	Varies based on experience	3.10 - 9.98% based on age	2.65 - 5.15% based on age
2015 and 2014							
Through fiscal year 2021	2.50%	N/A [^]	3.45%	N/A [^]	Varies based on experience	2.60 - 9.48% based on age	2.15 - 4.40% based on age
Thereafter	3.50%	N/A [^]	4.45%	N/A [^]	Varies based on experience	3.60 - 10.48% based on age	3.15 - 5.40% based on age
Projected COLAs	N/A [*]	N/A [*]	N/A [*]	N/A [*]	N/A [*]	N/A [*]	N/A [*]
Investment rate of return							
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.

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

Contributions: Contributions reported on Schedule 1 include actual contributions by State and, where applicable, the local employer's contribution revenue recorded in fiscal year 2017 that is due in fiscal year 2018 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.

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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	CPFPP
Year ended June 30:			
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 as a whole rather than by individual plan since the portfolio is managed as one pool of investments.

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

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios

(Unaudited)

June 30, 2017

	2017
Total OPEB liability:	
Service cost	\$ 533,776,726
Interest on total OPEB liability	458,485,628
Effect of changes of benefit terms	—
Difference between expected and actual experience	—
Effect of changes of assumptions	(1,800,090,007)
Contributions - employee	53,585,505
Benefit payments	(425,836,854)
Net change in total OPEB liability	(1,180,079,002)
Total OPEB liability-beginning	15,738,256,391
Total OPEB liability-ending (a)	\$ 14,558,177,389
Plan fiduciary net position:	
Contributions-employer	\$ 434,877,635
Contributions-employee	53,585,505
Net investment (loss) income	791,049
Benefit payments	(417,488,848)
Administrative expense	(8,894,576)
Net change in Plan fiduciary net position	62,870,765
Plan fiduciary net position-beginning	150,385,152
Plan fiduciary net position-ending (b)	213,255,917
Plan's net OPEB liability-ending (a)-(b)	\$ 14,344,921,472
Plan fiduciary net position as a percentage of the total OPEB liability	1.46%
Covered-employee payroll	\$ 2,609,923,735
Net OPEB liability as a percentage of covered-employee payroll	549.63%

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:
In 2017, the discount rate changed to 3.58% from 2.85%.

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Required Supplementary Information

Schedule of Investment Returns - Other Postemployment Benefit Plan

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

(Unaudited)

Year ended June 30:
2017

0.58%

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

See accompanying independent auditors' report.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

Schedule of Administrative Expenses

Year ended June 30, 2017

	<u>JRS</u>	<u>POPF</u>	<u>SPRS</u>	<u>CPFPF</u>	<u>TPAF</u>	<u>PFRS</u>	<u>PERS</u>	<u>NJSEDCP</u>	<u>Total</u>
Personnel services:									
Salaries and wages	\$ 82,714	1,424	82,653	1,435	4,221,544	958,754	6,868,339	260,674	12,477,537
Employee benefits	35,312	759	32,143	784	2,306,210	436,329	3,155,931	144,270	6,111,738
Total personnel services	118,026	2,183	114,796	2,219	6,527,754	1,395,083	10,024,270	404,944	18,589,275
Professional services:									
Actuarial services	6,241	436	36,766	430	401,401	511,185	461,397	—	1,417,856
Data processing	3,961	276	23,335	273	947,053	324,433	1,571,304	23,643	2,894,278
Information systems	9,155	593	50,360	630	1,683,685	666,913	3,602,669	—	6,014,005
Other professional (1)	240	17	1,636	17	59,213	22,705	97,616	115	181,559
Medical reviews (exams/hearings)	2,700	—	16,762	—	331,462	424,872	888,807	—	1,664,603
Elections	—	—	—	—	—	33,590	30,000	—	63,590
Internal audit and legal	3,447	241	20,303	237	824,005	282,281	1,367,150	—	2,497,664
Total professional services	25,744	1,563	149,162	1,587	4,246,819	2,265,979	8,018,943	23,758	14,733,555
Communication:									
Travel	14	1	84	1	6,302	4,808	10,430	—	21,640
Telephone	376	26	2,215	26	89,874	30,788	149,114	2,800	275,219
Postage	1,441	101	8,488	99	344,487	118,011	571,556	1,000	1,045,183
Motor pool	14	1	83	1	3,383	1,159	5,613	—	10,254
Printing and office	470	33	2,769	32	112,401	38,505	186,491	—	340,701
Total communication	2,315	162	13,639	159	556,447	193,271	923,204	3,800	1,692,997
Miscellaneous:									
Office space	3,127	218	18,418	215	747,512	256,077	1,240,237	—	2,265,804
Maintenance	30	2	178	2	7,209	2,469	11,960	—	21,850
Equipment	87	6	514	6	20,851	7,143	34,594	—	63,201
Other services and charges	1	—	5	—	247	85	411	12,001	12,750
Total miscellaneous	3,245	226	19,115	223	775,819	265,774	1,287,202	12,001	2,363,605
Total administrative expenses	\$ 149,330	4,134	296,712	4,188	12,106,839	4,120,107	20,253,619	444,503	37,379,432

(1) Portion of consulting

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Schedule of Investment Expenses

Year ended June 30, 2017

	<u>JRS</u>	<u>POPF</u>	<u>SPRS</u>	<u>CPFPPF</u>	<u>TPAF</u>	<u>PFRS</u>	<u>PERS</u>	<u>NJSEDCP</u>	<u>Total</u>
Investment expense \$	24,670	2,082	148,404	2,100	6,055,521	2,060,765	10,130,329	212,389	18,636,260

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

Schedule of Expenses for Consultants

Year ended June 30, 2017

	<u>JRS</u>	<u>POPF</u>	<u>SPRS</u>	<u>CPFPP</u>	<u>TPAF</u>	<u>PFRS</u>	<u>PERS</u>	<u>Total</u>
Actuarial:								
Conduent	\$ 6,241	436	36,766	430	—	511,185	461,397	1,016,455
Milliman	—	—	—	—	401,401	—	—	401,401
Medical reviews (exams/hearings)	2,700	—	16,762	—	331,462	424,872	888,807	1,664,603
Board elections:								
Global support	—	—	—	—	—	33,590	30,000	63,590
Total expenses for consultants	\$ <u>8,941</u>	<u>436</u>	<u>53,528</u>	<u>430</u>	<u>732,863</u>	<u>969,647</u>	<u>1,380,204</u>	<u>3,146,049</u>

See accompanying independent auditors' report.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

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

June 30, 2017

	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Total
Assets:								
Cash and cash equivalents	\$ 5,000,117	284,097	18,969,604	177,544	353,178,098	196,682,671	307,314,387	881,606,518
Receivables:								
Contributions:								
Members	676,066	—	1,094,446	—	76,505,113	51,842,902	59,619,441	189,737,968
Employers	—	—	80,304	—	26,569,423	1,032,873,483	1,042,303,973	2,101,827,183
Accrued interest and dividends	486	17	2,024	26	41,228	4,201,002	35,826	4,280,609
Other	1,307,451	2,507	1,259,094	237,752	12,647,936	7,178,418	22,164,889	44,798,047
Total receivables	1,984,003	2,524	2,435,868	237,778	115,763,700	1,096,095,805	1,124,124,129	2,340,643,807
Investments, at fair value:								
Cash Management Fund	3,912,496	5,417,728	13,376,644	1,638,567	61,465,645	46,031,975	38,789,354	170,632,409
Common Pension Fund D	121,379,434	—	1,175,226,557	—	15,621,176,710	15,613,185,805	18,125,719,900	50,656,688,406
Common Pension Fund E	47,103,013	—	553,910,211	—	7,066,359,178	7,640,826,759	8,669,662,392	23,977,861,553
Total investments	172,394,943	5,417,728	1,742,513,412	1,638,567	22,749,001,533	23,300,044,539	26,834,171,646	74,805,182,368
Securities lending collateral	2,296,449	—	22,234,804	—	295,546,248	295,395,064	342,931,177	958,403,742
Members' loans and mortgages	511,721	—	15,479,955	—	283,207,356	1,462,285,744	619,523,933	2,381,008,709
Total assets	182,187,233	5,704,349	1,801,633,643	2,053,889	23,796,696,935	26,350,503,823	29,228,065,272	81,366,845,144
Liabilities:								
Accounts payable and accrued expenses:	—	1,011	—	—	81,688,581	5,988,986	96,699,759	184,378,337
Retirement benefits payable	4,515,169	81,006	17,722,568	147,911	355,065,159	196,739,631	309,203,462	883,474,906
Noncontributory group life insurance premiums payable	—	—	80,304	—	4,029,942	3,288,170	7,911,760	15,310,176
Administrative expense payable	50,960	1,464	105,195	1,482	4,292,415	1,460,768	7,180,823	13,093,107
Securities lending collateral and rebates payable	2,295,771	—	22,228,241	—	295,459,009	295,307,869	342,829,950	958,120,840
Total liabilities	6,861,900	83,481	40,136,308	149,393	740,535,106	502,785,424	763,825,754	2,054,377,366
Net position restricted for pensions	\$ 175,325,333	5,620,868	1,761,497,335	1,904,496	23,056,161,829	25,847,718,399	28,464,239,518	79,312,467,778

See accompanying independent auditors' report.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

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

Year ended June 30, 2017

	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	\$ 10,348,191	—	23,721,785	—	790,788,033	51,759,235	331,469,748	1,208,086,992
Local	—	—				344,119,149	516,482,389	860,601,538
Employers:								
State	20,341,379	—	53,006,614	575,000	1,127,018,480	117,025,276	539,538,390	1,857,505,139
Local	—	—	—	—	—	885,018,458	926,393,189	1,811,411,647
Nonemployer	—	—	—	—	—	86,467,000	—	86,467,000
Employer specific and other	1,121,097	552,131	3,925	964,280	1,696,090	13,107,651	16,358,762	33,803,936
Total contributions	<u>31,810,667</u>	<u>552,131</u>	<u>76,732,324</u>	<u>1,539,280</u>	<u>1,919,502,603</u>	<u>1,497,496,769</u>	<u>2,330,242,478</u>	<u>5,857,876,252</u>
Investment income:								
Net increase/(decrease) in fair value of investments	16,847,510	(1,719)	175,221,726	(486)	2,300,089,571	2,304,714,942	2,662,886,052	7,459,757,596
Interest	3,208,312	34,648	32,328,268	12,685	442,954,741	488,450,683	549,638,114	1,516,627,451
	20,055,822	32,929	207,549,994	12,199	2,743,044,312	2,793,165,625	3,212,524,166	8,976,385,047
Less investment expense	24,670	2,082	148,404	2,100	6,055,521	2,060,765	10,130,329	18,423,871
Net investment income	<u>20,031,152</u>	<u>30,847</u>	<u>207,401,590</u>	<u>10,099</u>	<u>2,736,988,791</u>	<u>2,791,104,860</u>	<u>3,202,393,837</u>	<u>8,957,961,176</u>
Total additions	<u>51,841,819</u>	<u>582,978</u>	<u>284,133,914</u>	<u>1,549,379</u>	<u>4,656,491,394</u>	<u>4,288,601,629</u>	<u>5,532,636,315</u>	<u>14,815,837,428</u>
Deductions:								
Benefits:								
Benefit expense - retirement allowances	55,642,074	1,069,209	215,243,453	1,535,623	4,198,977,288	2,374,959,072	3,587,215,468	10,434,642,187
Noncontributory group insurance expense	664,379	—	1,968,614	—	39,099,480	38,969,665	80,002,130	160,704,268
Refunds of contributions	59,265	—	91,879	—	68,191,977	7,556,700	143,601,094	219,500,915
Administrative and miscellaneous expenses	150,588	4,134	294,745	4,188	11,923,787	4,124,457	19,648,715	36,150,614
Total deductions	<u>56,516,306</u>	<u>1,073,343</u>	<u>217,598,691</u>	<u>1,539,811</u>	<u>4,318,192,532</u>	<u>2,425,609,894</u>	<u>3,830,467,407</u>	<u>10,850,997,984</u>
Change in net position	(4,674,487)	(490,365)	66,535,223	9,568	338,298,862	1,862,991,735	1,702,168,908	3,964,839,444
Net position restricted for pensions:								
Beginning of year	179,999,820	6,111,233	1,694,962,112	1,894,928	22,717,862,967	23,984,726,664	26,762,070,610	75,347,628,334
End of year	<u>\$ 175,325,333</u>	<u>5,620,868</u>	<u>1,761,497,335</u>	<u>1,904,496</u>	<u>23,056,161,829</u>	<u>25,847,718,399</u>	<u>28,464,239,518</u>	<u>79,312,467,778</u>

See accompanying independent auditors' report.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

Combining Schedule of Balance Sheet Information
Fiduciary Funds – Agency Funds

June 30, 2017

	<u>Alternate Benefit Program Fund</u>	<u>Pension Adjustment Fund</u>	<u>Dental Expense Program Fund</u>	<u>Total Agency Funds</u>
Assets:				
Cash and cash equivalents	\$ 950,247	1,028,528	225,496	2,204,271
Receivables:				
State related employer contributions	—	258,955	—	258,955
Other	<u>38,879,816</u>	<u>3,457</u>	<u>1,476,104</u>	<u>40,359,377</u>
Total receivables	<u>38,879,816</u>	<u>262,412</u>	<u>1,476,104</u>	<u>40,618,332</u>
Investments, at fair value:				
Cash Management Fund	<u>896,915</u>	<u>1,009,611</u>	<u>47,362,532</u>	<u>49,269,058</u>
Total investments	<u>896,915</u>	<u>1,009,611</u>	<u>47,362,532</u>	<u>49,269,058</u>
Total assets	<u>\$ 40,726,978</u>	<u>2,300,551</u>	<u>49,064,132</u>	<u>92,091,661</u>
Liabilities:				
Accounts payable and accrued expenses	\$ 40,644,958	—	49,064,132	89,709,090
Assets held for local contributing employers	—	2,023,233	—	2,023,233
Pension adjustment payroll payable	—	72,370	—	72,370
Due to State of New Jersey	82,020	44,420	—	126,440
Due to other funds	<u>—</u>	<u>160,528</u>	<u>—</u>	<u>160,528</u>
Total liabilities	<u>\$ 40,726,978</u>	<u>2,300,551</u>	<u>49,064,132</u>	<u>92,091,661</u>

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

Year ended June 30, 2017

	<u>Alternate Benefit Program Fund</u>	<u>Pension Adjustment Fund</u>	<u>Dental Expense Program Fund</u>	<u>Total Agency Funds</u>
Additions:				
Contributions:				
Members	\$ 817,835	—	101,975,407	102,793,242
Employers	<u>198,032,827</u>	<u>1,365,090</u>	<u>37,118,575</u>	<u>236,516,492</u>
Total contributions	<u>198,850,662</u>	<u>1,365,090</u>	<u>139,093,982</u>	<u>339,309,734</u>
Investment income:				
Net decrease in fair value of investments	(205)	(151)	(11,589)	(11,945)
Interest	<u>12,149</u>	<u>11,736</u>	<u>282,229</u>	<u>306,114</u>
Total investment income	<u>11,944</u>	<u>11,585</u>	<u>270,640</u>	<u>294,169</u>
Total additions	<u>198,862,606</u>	<u>1,376,675</u>	<u>139,364,622</u>	<u>339,603,903</u>
Deductions:				
Benefits	198,797,510	1,559,942	136,383,871	336,741,323
Refunds of contributions	<u>65,096</u>	<u>(183,267)</u>	<u>2,980,751</u>	<u>2,862,580</u>
Total deductions	<u>198,862,606</u>	<u>1,376,675</u>	<u>139,364,622</u>	<u>339,603,903</u>
Change in net position	—	—	—	—
Net position – beginning of year	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Net position – end of year	<u>\$ —</u>	<u>—</u>	<u>—</u>	<u>—</u>

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

June 30, 2017

	State	Local	Total Agency Fund – Dental Expense Program Fund
Assets:			
Cash and cash equivalents	\$ 217,316	8,180	225,496
Receivables:			
Other	1,388,124	87,980	1,476,104
Total receivables	1,388,124	87,980	1,476,104
Investments, at fair value:			
Cash Management Fund	33,094,127	14,268,405	47,362,532
Total investments	33,094,127	14,268,405	47,362,532
Total assets	\$ 34,699,567	14,364,565	49,064,132
Liabilities:			
Accounts payable and accrued expenses	\$ 34,699,567	14,364,565	49,064,132
Total liabilities	\$ 34,699,567	14,364,565	49,064,132

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

Year ended June 30, 2017

	<u>State</u>	<u>Local</u>	<u>Total Agency Fund – Dental Expense Program Fund</u>
Additions:			
Contributions:			
Members	\$ 54,759,378	47,216,029	101,975,407
Employers	<u>31,923,772</u>	<u>5,194,803</u>	<u>37,118,575</u>
Total contributions	<u>86,683,150</u>	<u>52,410,832</u>	<u>139,093,982</u>
Investment income:			
Net decrease in fair value of investments	(11,009)	(580)	(11,589)
Interest	<u>203,893</u>	<u>78,336</u>	<u>282,229</u>
Total investment income	<u>192,884</u>	<u>77,756</u>	<u>270,640</u>
Total additions	<u>86,876,034</u>	<u>52,488,588</u>	<u>139,364,622</u>
Deductions:			
Benefits	83,774,750	52,609,121	136,383,871
Refunds of contributions	<u>3,101,284</u>	<u>(120,533)</u>	<u>2,980,751</u>
Total deductions	<u>86,876,034</u>	<u>52,488,588</u>	<u>139,364,622</u>
Change in net position	—	—	—
Net position – beginning of year	<u>—</u>	<u>—</u>	<u>—</u>
Net position – end of year	<u>\$ —</u>	<u>—</u>	<u>—</u>

See accompanying independent auditors' report.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS

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

June 30, 2017

	<u>Balance</u> <u>June 30, 2016</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance</u> <u>June 30, 2017</u>
Assets:				
Cash and cash equivalents	\$ 1,050,138	170,856,707	170,956,598	950,247
Receivables:				
Other	35,077,677	38,879,816	35,077,677	38,879,816
Investments, at fair value:				
Cash Management Fund	<u>712,038</u>	<u>202,437,328</u>	<u>202,252,451</u>	<u>896,915</u>
Total assets	<u>\$ 36,839,853</u>	<u>412,173,851</u>	<u>408,286,726</u>	<u>40,726,978</u>
Liabilities:				
Accounts payable and accrued expenses	\$ 36,833,743	41,261,781	37,450,566	40,644,958
Due to State of New Jersey	<u>6,110</u>	<u>82,020</u>	<u>6,110</u>	<u>82,020</u>
Total liabilities	<u>\$ 36,839,853</u>	<u>41,343,801</u>	<u>37,456,676</u>	<u>40,726,978</u>

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

June 30, 2017

	<u>Balance June 30, 2016</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance June 30, 2017</u>
Assets:				
Cash and cash equivalents	\$ 1,737,674	856,998	1,566,144	1,028,528
Receivables:				
State related employer contributions	316,085	1,077,286	1,134,416	258,955
Other	683	14,879	12,105	3,457
Investments, at fair value:				
Cash Management Fund	525,341	2,155,239	1,670,969	1,009,611
Total assets	<u>\$ 2,579,783</u>	<u>4,104,402</u>	<u>4,383,634</u>	<u>2,300,551</u>
Liabilities:				
Assets held for local contributing employers	\$ 2,226,939	—	203,706	2,023,233
Pension adjustment payroll payable	140,204	1,562,740	1,630,574	72,370
Due to State of New Jersey	23,980	44,420	23,980	44,420
Due to other funds	188,660	985,532	1,013,664	160,528
Total liabilities	<u>\$ 2,579,783</u>	<u>2,592,692</u>	<u>2,871,924</u>	<u>2,300,551</u>

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

June 30, 2017

	<u>Balance June 30, 2016</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance June 30, 2017</u>
Assets:				
Cash and cash equivalents	\$ 35,083	44,965,819	44,775,406	225,496
Receivables:				
Other	839,880	144,745,254	144,109,030	1,476,104
Investments, at fair value:				
Cash Management Fund	40,175,944	221,464,831	214,278,243	47,362,532
Total assets	<u>\$ 41,050,907</u>	<u>411,175,904</u>	<u>403,162,679</u>	<u>49,064,132</u>
Liabilities:				
Accounts payable and accrued expenses	\$ 41,050,907	43,374,118	35,360,893	49,064,132
Total liabilities	<u>\$ 41,050,907</u>	<u>43,374,118</u>	<u>35,360,893</u>	<u>49,064,132</u>

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

June 30, 2017

	<u>Balance</u> <u>June 30, 2016</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance</u> <u>June 30, 2017</u>
Assets:				
Cash and cash equivalents	\$ 16,075	38,550,097	38,348,856	217,316
Receivables:				
Other	836,832	87,024,223	86,472,931	1,388,124
Investments, at fair value:				
Cash Management Fund	<u>29,809,733</u>	<u>156,968,013</u>	<u>153,683,619</u>	<u>33,094,127</u>
Total assets	<u>\$ 30,662,640</u>	<u>282,542,333</u>	<u>278,505,406</u>	<u>34,699,567</u>
Liabilities:				
Accounts payable and accrued expenses	<u>\$ 30,662,640</u>	<u>34,908,610</u>	<u>30,871,683</u>	<u>34,699,567</u>
Total liabilities	<u>\$ 30,662,640</u>	<u>34,908,610</u>	<u>30,871,683</u>	<u>34,699,567</u>

See accompanying independent auditors' report.

**STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS**

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

June 30, 2017

	<u>Balance June 30, 2016</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance June 30, 2017</u>
Assets:				
Cash and cash equivalents	\$ 19,008	6,415,722	6,426,550	8,180
Receivables:				
Other	3,048	57,721,031	57,636,099	87,980
Investments, at fair value:				
Cash Management Fund	10,366,211	64,496,818	60,594,624	14,268,405
Total assets	<u>\$ 10,388,267</u>	<u>128,633,571</u>	<u>124,657,273</u>	<u>14,364,565</u>
Liabilities:				
Accounts payable and accrued expenses	\$ 10,388,267	8,465,508	4,489,210	14,364,565
Total liabilities	<u>\$ 10,388,267</u>	<u>8,465,508</u>	<u>4,489,210</u>	<u>14,364,565</u>

See accompanying independent auditors' report.